Directions

- Complete one Math's Mate sheet per week. Completing all of them at the start of the summer or leaving them all for the end of the summer will defeat the purpose of this assignment.
- After you complete each sheet, use the answer key to check your work. Circle any problems that you do not understand, and be prepared to ask questions about them in the fall.
- Feel free to use scratch paper to work out any of the problems. Please attach that scrap paper to the sheet you're working on once you're completed it.
- This work should be completed as independently as possible. It's much more important that your teacher sees what you can do on your own than that you get every problem right.

MATH'S MATE

Term 4 - Sheet 1

RED

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	24	9	33	11	30	7	18	12	6	25
+ 6										

2. [– Whole Numbers to 10]

	12	9	18	17	10	34	13	41	26	55
– 7										

3. [× Whole Numbers to 12]

	3	6	2	9	7	12	10	5	4	8
× 8										

4. [÷ Whole Numbers to 12]

	40	15	25	60	45	5	55	30	35	20
÷ 5										

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

48 x 362 = 17,376

Check:

(4+8) x (3+6+2) = 1+7+3+7+6

12 x 11 = 24

(1+2) x (1+1) = 2+4

3 x 2 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 46 x 129 = 5934

b) 199 x 1997 = 97,403

Answers: a) may be correct, b) definitely wrong

5. [Large Number +,–]

$$\begin{array}{r} 1000 \\ -\ 243 \\ \hline \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 89 \\ \times\ 74 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

20,900 ÷ 100 =

8. [Decimals]

$$\begin{array}{r} 5.31 \\ -\ 0.87 \\ \hline \end{array}$$

9. [Fractions]

$3\frac{1}{6} + 2\frac{4}{6} =$

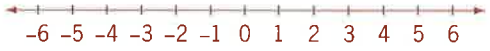
10. [Decimals / Fractions / Percents] *

Which ratio forms a proportion with $\frac{1}{2}$?

A) $\frac{7}{7}$ B) $\frac{6}{10}$ C) $\frac{1}{12}$ D) $\frac{4}{8}$

11. [Integers]

Mark with a cross the number that is 2 to the right of –3.



12. [Operations] *

23 – 8 + 4 + 5 =

13. [Place Value] *

Estimate the sum of the decimals 5.08 and 6.9 by rounding to the nearest whole number before adding.

14. [Patterns / Equations]

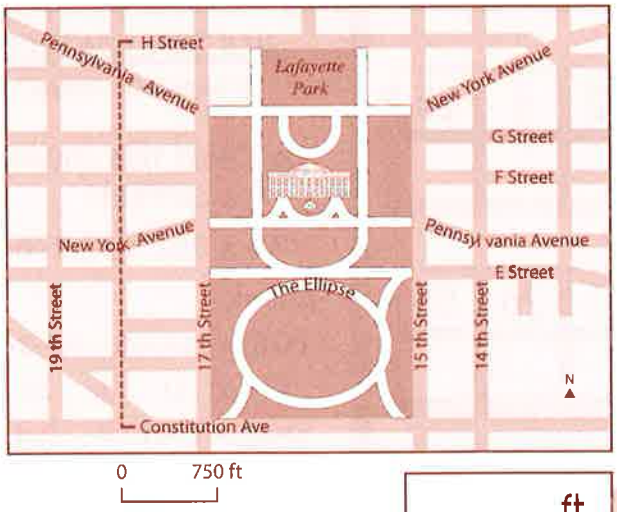
Complete the table:

☆ **Patterns**

No. of stars	1	2	3	4
No. of points	5	10		20

15. [Location] *

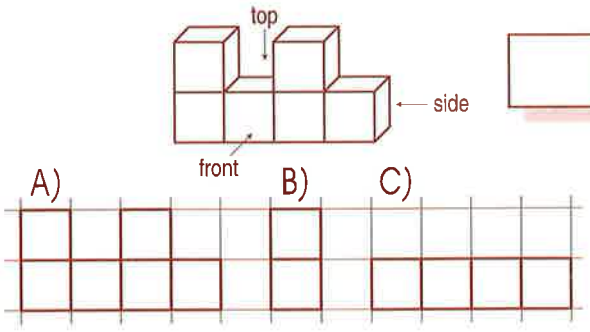
What is the distance along 18th Street from H Street to Constitution Avenue?



ft

16. [Geometry]

Which of the shapes below is the side view of this solid?



17. [Units of Measurement] *

Write in quarts:

3 gal = qt

18. [Measuring] *

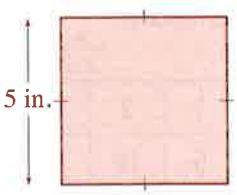
The flight to Los Angeles was scheduled for 8:45 A.M. but was delayed 95 minutes due to fog on the runway. What time did the flight leave?

:

19. [Perimeter / Area / Volume] *

Find the area of this square.

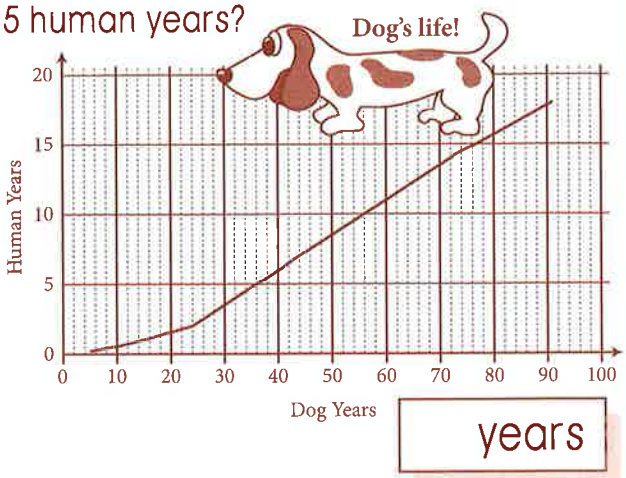
[Area = length × length]



in.^{2}

20. [Data Analysis]

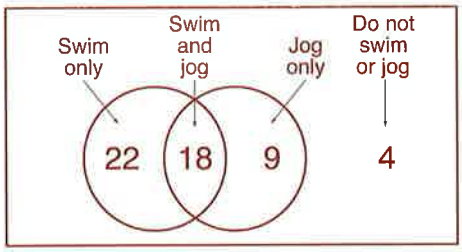
How old, in dog years, is your dog after 5 human years?



years

21. [Probability / Statistics]

How many people jog?



22. [Problem Solving 1]

Fill in the missing number.

12 × ☐ = 36

23. [Problem Solving 2] *

Complete the magic square.

[Hint: Every row, column and diagonal has the same sum.]

4		
	6	
	1	8

24. [Problem Solving 3]

Fill in the appropriate numbers for the titles of the 5 famous stories below. Now add the 5 numbers.

	Hundreds	Tens	Units	
Ali Baba and the				Thieves
				Dalmatians
The				Musketeers
Around the World in				Days
Snow White and the				Dwarfs
TOTAL				

MATH'S MATE

Term 4 - Sheet 2

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	14	32	19	10	15	28	7	13	31	16
+ 4										

2. [– Whole Numbers to 10]

	11	26	8	5	12	33	14	9	40	7
– 3										

3. [× Whole Numbers to 12]

	9	7	1	6	5	12	4	11	3	10
× 5										

4. [÷ Whole Numbers to 12]

	64	40	88	16	72	56	24	32	96	48
÷ 8										

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

46 x 92 x 39 = 165,048

Check: (9's can be thrown out)

(4+6) x 2 x 3 = 1+6+5+0+4+8

10 x 2 x 3 = 24

1 x 2 x 3 = 2+4

2 x 3 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 21 x 85 x 37 = 69,045

b) 220 x 209 = 45,980

Answers: a) definitely wrong, b) may be correct

5. [Large Number +,–]

$$\begin{array}{r} 4205 \\ -\ 2174 \\ \hline \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 64 \\ \times\ 59 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$3100 \div 10 =$

8. [Decimals]

$$\begin{array}{r} 98.45 \\ -\ 23.76 \\ \hline \end{array}$$

9. [Fractions]

$4\frac{5}{10} + 3\frac{2}{10} =$

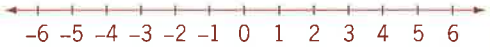
10. [Decimals / Fractions / Percents] *

Which ratio forms a proportion with $\frac{3}{4}$?

A) $\frac{3}{8}$ B) $\frac{12}{16}$ C) $\frac{1}{12}$ D) $\frac{7}{8}$

11. [Integers]

Mark with a cross the number that is 4 to the left of –1.



12. [Operations] *

$16 - 4 + 7 - 3 =$

13. [Place Value] *

Estimate the difference between the decimals 24.4 and 14.8 by rounding to the nearest whole number before subtracting.

14. [Patterns / Equations]

Complete the table:

Food Intake - Giant Panda

No. of days	1	2	3	4
Bamboo (lb)	30		90	

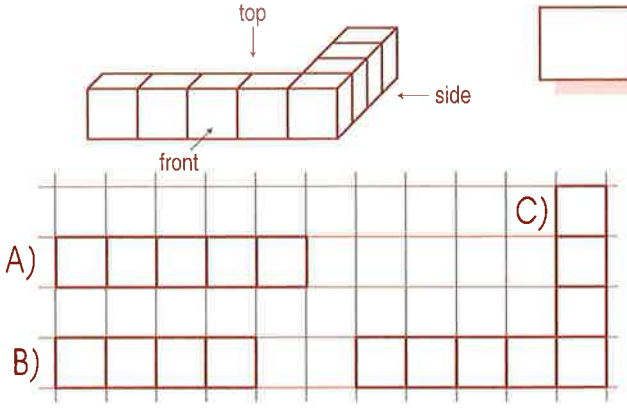
15. [Location] *

What is the distance in kilometers from Grand Rapids to Toronto?

km

16. [Geometry]

Which of the shapes below is the front view of this solid?



17. [Units of Measurement] *

Write in pints:

8 qt = pt

18. [Measuring] *

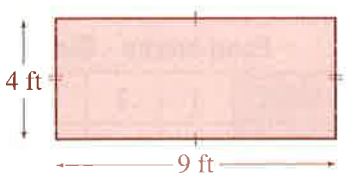
Teams in the Tour de France start at 5 minute intervals. The first team leaves at 2:15 P.M. There are 21 teams. At what time does the final team depart?

:

19. [Perimeter / Area / Volume] *

Find the area of this rectangle.

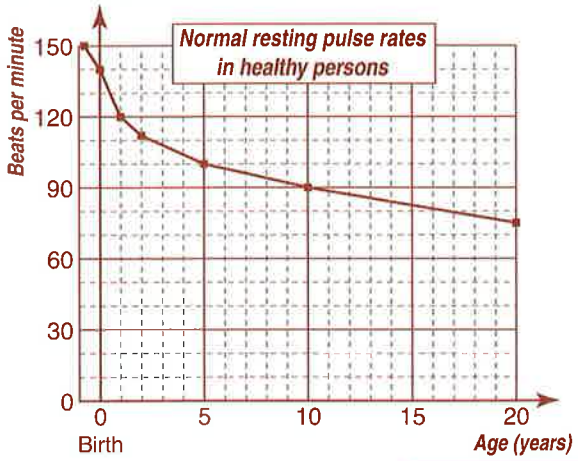
[Area = length × width]



ft^2

20. [Data Analysis]

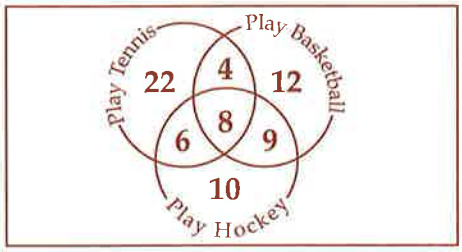
During which year of a young person's life does his resting pulse rate decrease the most?



year

21. [Probability / Statistics]

A total of forty students play tennis. How many of those students also play basketball and hockey?



22. [Problem Solving 1]

Fill in the missing number.

$\square \div 5 = 9$

23. [Problem Solving 2] *

Complete the magic square.

[Hint: Every row, column and diagonal has the same sum.]

		4
	6	
8	7	

24. [Problem Solving 3] *

How much is one book?

$

MATH'S MATE

Term 4 - Sheet 3

RED

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	33	20	29	8	31	24	12	35	17	6
+ 10										

2. [– Whole Numbers to 10]

	14	22	30	15	16	17	38	13	21	19
– 8										

3. [× Whole Numbers to 12]

	4	8	5	7	1	6	12	2	10	9
× 4										

4. [÷ Whole Numbers to 12]

	70	28	14	56	35	63	42	84	77	21
÷ 7										

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

31 x 104.8 = 3248.8

Check:

(3+1) x (1+4+8) = 3+2+4+8+8

4 x (1+3) = 2+5

4 x 4 = 7

1+6 = 7

Yes, the answer is probably correct.

Could these be correct?

a) 12.2 x 16.5 = 201.3

b) 4.05 x 19.7 = 79.785

Answers: a) may be correct, b) may be correct

5. [Large Number +,–]

$$\begin{array}{r} 3765 \\ -\ 896 \\ \hline \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 58 \\ \times\ 73 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

8000 ÷ 100 =

8. [Decimals]

$$\begin{array}{r} 24.19 \\ -\ 13.85 \\ \hline \end{array}$$

9. [Fractions]

$3 - \frac{2}{5} =$

10. [Decimals / Fractions / Percents] *

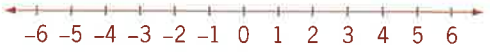
The price of 4 pounds of grapes is $8.40

What is the price of 1 pound of grapes?

$

11. [Integers]

Start at –1. Move 4 to the left. Then move 3 to the right. At what number are you?



12. [Operations] *

120 ÷ (5 × 6) =

13. [Place Value] *

Estimate the difference between the decimals 9.25 and 6.5 by rounding to the nearest whole number before subtracting.

14. [Patterns / Equations]

Complete the table:

Kangaroo

Speed (km/h)	10	15	20	25
Hop length (m)	1.2		2.4	3.0

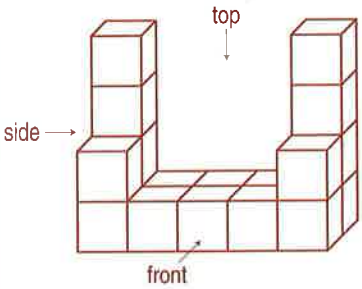
15. [Location] *

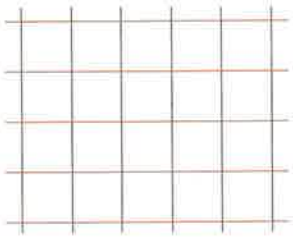
How far is it from the Santos Dumont Airport to the International Airport in Brazil?

mi

16. [Geometry]

Draw the top view of this solid.





17. [Units of Measurement] *

Write in liters:

9000 mL = L

18. [Measuring] *

The Sydney to Hobart Yacht Race starts at 1:10 P.M. Eighty minutes before this, other boats are excluded from the area. At what time must they be gone?

:

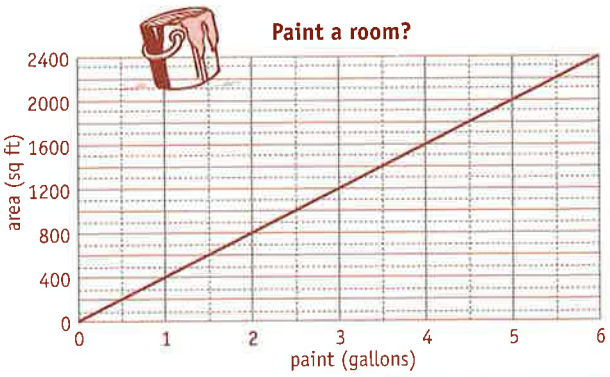
19. [Perimeter / Area / Volume] *

Find the area of this door.

cm^2

20. [Data Analysis]

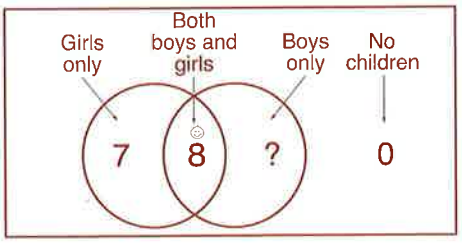
How much paint would you need to paint 1400 square feet of wall area?



gal

21. [Probability / Statistics]

Twenty families were surveyed. How many have boys only?



22. [Problem Solving 1]

Fill in the missing number.

$8 \times$ ☐ $= 56$

23. [Problem Solving 2] *

Complete the magic square.

[Hint: Every row, column and diagonal has the same sum.]

12	4	
	9	
	14	

24. [Problem Solving 3] *

A bookshop sold 200 books in its first year of business. Since then sales have doubled every year. What was the bookshop's profit in the sixth year given the yearly profit formula below?

Yearly profit = books sold × $2 − $1000

$

MATH'S MATE

Term 4 - Sheet 4

RED

Name: .....

Due Date: ..... / ..... / .....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	12	39	24	17	36	20	31	13	8	25
+ 2										

2. [– Whole Numbers to 10]

	10	35	24	6	27	9	13	32	31	28
– 4										

3. [× Whole Numbers to 12]

	9	10	4	5	12	3	1	6	8	11
× 10										

4. [÷ Whole Numbers to 12]

	11	7	6	3	2	8	5	10	9	12
÷ 1										

DIVISION

(Check Your Answer)

e.g. Could this answer be correct?

45,980 / 209 = 220

Check: (9's can be thrown out)

(4+5+8) / 2 = 2+2

(1+7) / 2 = 4

8 / 2 = 4

Yes, the answer is probably correct.

Could these be correct?

a) 19,646 / 517 = 38

b) 3525 / 47 = 65

Answers: a) may be correct, b) definitely wrong

5. [Large Number +,–]

4 3 8 2
– 3 7 6 9

6. [Large Number ×,÷]

7 7
× 2 6

7. [Powers of 10 ×,÷]

50,000 ÷ 100 =

8. [Decimals]

5 7.0 8
– 4 5.9 6

9. [Fractions]

$2 - \frac{2}{3} =$

10. [Decimals / Fractions / Percents] *

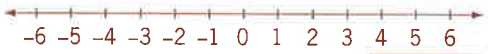
Which is cheaper per apple?

A) $1.80 for 4 apples

B) $2.10 for 5 apples

11. [Integers]

Start at 4. Move 2 to the right. Then move 9 to the left. At what number are you?



12. [Operations] *

(19 – 12) × 5 =

13. [Place Value] *

Estimate the sum of the decimals 10.38 and 4.71 by rounding to the nearest whole number before adding.

14. [Patterns / Equations]

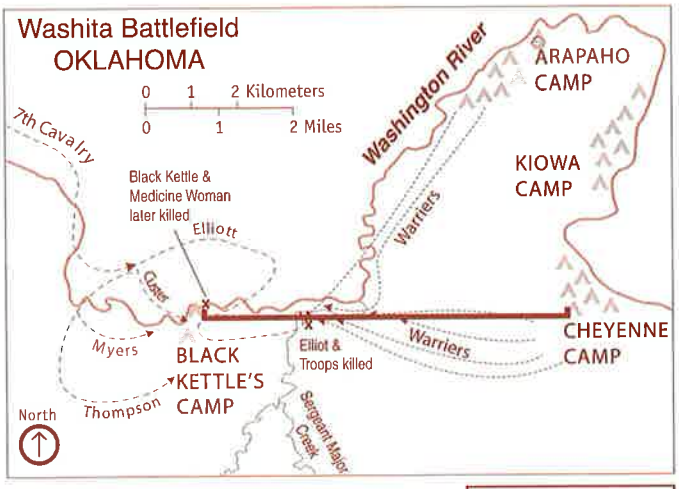
Complete the table:

Timetable

Period	1	2	3	4
Starting time	8:25	9:10		10:40

15. [Location] *

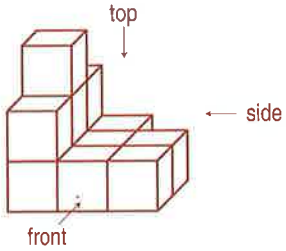
What is the distance in miles from the Cheyenne camp to Black Kettle's camp?

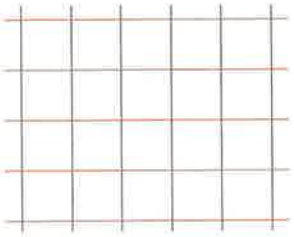


mi

16. [Geometry]

Draw the side view of this solid.





17. [Units of Measurement] *

Write in milliliters:

6 L = mL

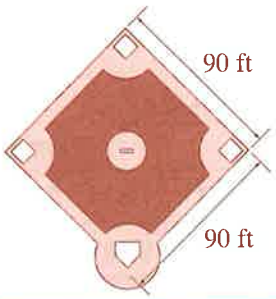
18. [Measuring] *

The exam started at 11:20 A.M. After 1 hour and 20 minutes Billy finished and left the room. He left 15 minutes before me. At what time did I leave the exam room?

:

19. [Perimeter / Area / Volume] *

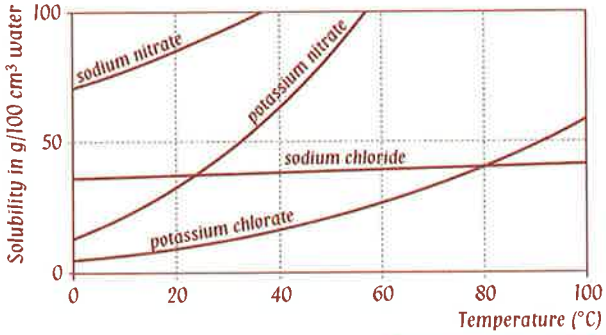
Find the area of this baseball infield.



ft²

20. [Data Analysis]

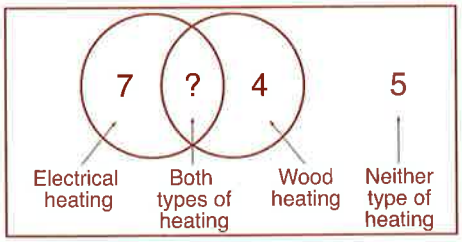
At what temperature is the solubility of sodium chloride and potassium chlorate the same?



°C

21. [Probability / Statistics] *

How many of the 20 families surveyed have both electrical and wood heating?



22. [Problem Solving 1]

Fill in the missing number.

36 ÷ ☐ = 4

23. [Problem Solving 2] *

Complete the magic square.

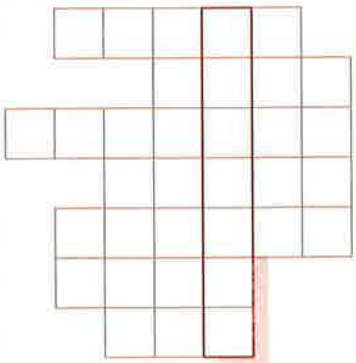
[Hint: Every row, column and diagonal has the same sum.]

12	16	
	15	
	14	

24. [Problem Solving 3]

Fill in the crosswords about time to reveal the name for a long interval of time in the vertical box.

Hangs on a wall
7 days
3600 every hour
On your wrist
60 seconds
60 minutes
1440 minutes



MATH'S MATE

Term 4 - Sheet 5

RED

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	37	20	5	28	16	23	12	31	14	9
+ 5										

2. [– Whole Numbers to 10]

	11	17	36	13	14	48	15	20	29	32
– 10										

3. [× Whole Numbers to 12]

	3	6	9	11	7	2	10	5	4	8
× 12										

4. [÷ Whole Numbers to 12]

	110	44	77	88	11	99	66	132	121	33
÷ 11										

MAGIC NUMBERS

- Take any 4-digit number with 4 different digits. (e.g. 3, 1, 7 & 9)
- Make the largest number you can. (9731)
- Then make the smallest number you can. (1379)
- Subtract it from your large number.

  9731 – 1379 = 8352
- Now take this answer and repeat the process. (8532 – 2358)

  (If your answer has only 3 digits, place a zero at the front.)
- What number will you always end up with?

5. [Large Number +,–]

$$\begin{array}{r} 1679 \\ +\ 840 \\ \hline \square \end{array}$$

6. [Large Number ×,÷]

$$\square$$

$$8\overline{)9240}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 360 \\ \times\ 10 \\ \hline \square \end{array}$$

8. [Decimals]

$$\begin{array}{r} 12.1 \\ \times\ 4 \\ \hline \square \end{array}$$

9. [Fractions]

Of the 18 plants in the garden, one third are roses. How many are roses? ☐

10. [Decimals / Fractions / Percents] *

Two of the four Beatles were left handed. What percent is this? ☐ %

11. [Integers]

Which number is not a square number?

A) 4 B) 6 C) 9

 ☐

12. [Operations] *

6 – (18 – 13) + 3 = ☐

13. [Place Value] *

Estimate the total cost by rounding each amount to the nearest hundred before adding:

$79.00 + $96.00 + $309.00 + + $112.00

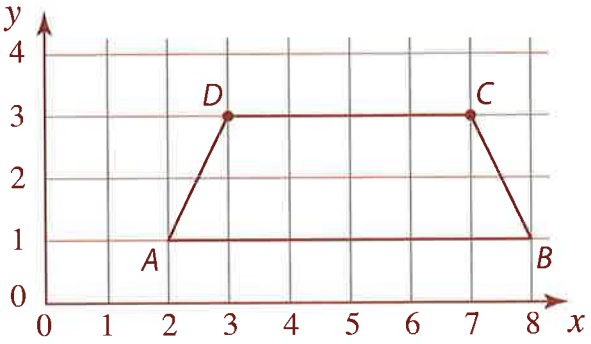
$ ☐

14. [Patterns / Equations]

46 + ☐ = 92

15. [Location]

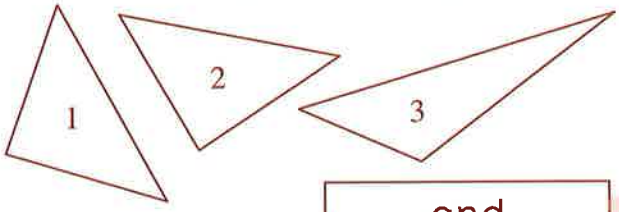
What is the length in units of segment $\overline{CD}$?



units

16. [Geometry]

Which two triangles are congruent?



and

17. [Units of Measurement] *

How many 5000 L water tanks are necessary to fill a 30,000 L swimming pool?

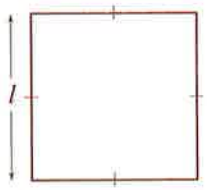
18. [Measuring] *

The Olympic record for the men's 1500 m athletics race was set by Noah Ngeny - Kenya (Sydney 2000) at 3:32.07 (3 min, 32.07 s). How many seconds behind El Guerrouj's world record (1998) of 3:26.00 was he?

s

19. [Perimeter / Area / Volume] *

The perimeter of a square is 40 ft. Find the side length.

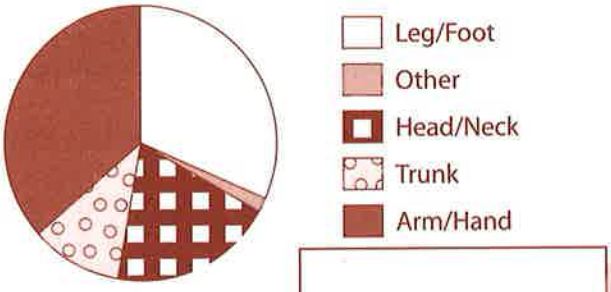


ft

20. [Data Analysis]

On which part of the body is a 10 to 14 year old most likely to be bitten by a dog?

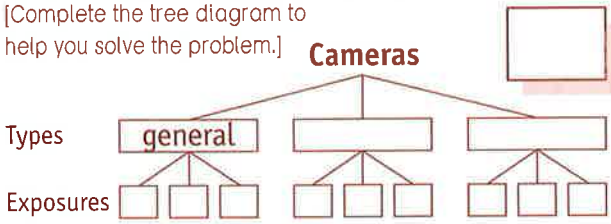
Dog Bite Injuries: 10 - 14 yr. olds
(as treated in emergency departments)



21. [Probability / Statistics]

A store is selling general, outdoor and waterproof disposable cameras. Each type comes with 15, 27 and 36 exposures. How many combinations of disposable cameras are available?

[Complete the tree diagram to help you solve the problem.]



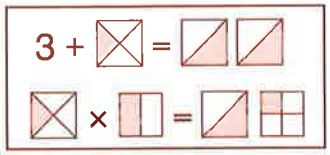
22. [Problem Solving 1] *

Which deal costs less per ounce?

A) \$5 for 50 oz
B) \$3 for 25 oz

23. [Problem Solving 2] *

Each flag represents a different digit. Can you find the solution to the cipher?



24. [Problem Solving 3]

Fill in the missing digits, using the digits 1 to 9.

$$\begin{array}{r} 1\square 9 \\ \times\quad 6 \\ \hline \square 5\square \end{array}$$

MATH'S MATE

Term 4 - Sheet 6

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	16	32	25	11	39	30	23	17	24	18
+ 9										

2. [– Whole Numbers to 10]

	14	12	30	15	16	17	28	13	11	19
– 8										

3. [× Whole Numbers to 12]

	4	11	2	9	10	5	8	12	6	7
× 6										

4. [÷ Whole Numbers to 12]

	110	80	90	30	70	10	50	100	40	120
÷ 10										

MOEBIUS MAGIC

A Mathematician confided,
That a Moebius band
is one sided,
And you'll get quite a laugh,
if you cut one in half,
for it stays in one piece
when divided!

- Draw a line down the middle of a long strip of paper.
- Make one twist in the strip and glue the ends together to form a band.
- Cut the band along the line you drew down the middle of your strip.
- Try with no twists.
- Try with two twists.

5. [Large Number +,–]

$$\begin{array}{r} 4212 \\ 1045 \\ +\ 2835 \\ \hline \square \end{array}$$

6. [Large Number ×,÷]

$$\square \overline{)\ 7350}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 900 \\ \times\ 100 \\ \hline \square \end{array}$$

8. [Decimals]

$$\begin{array}{r} 24.2 \\ \times\ \ 3 \\ \hline \square \end{array}$$

9. [Fractions] *

Three quarters of the 12 farms breed cattle. How many farms breed cattle? ☐

10. [Decimals / Fractions / Percents] *

Five of the top twenty baby names were the same in 1880 as they were in 2010. What percent of names were the same? ☐ %

11. [Integers]

$2^2 = 2 \times 2 =$ ☐

12. [Operations] *

$17 + 16 - (23 - 14) =$ ☐

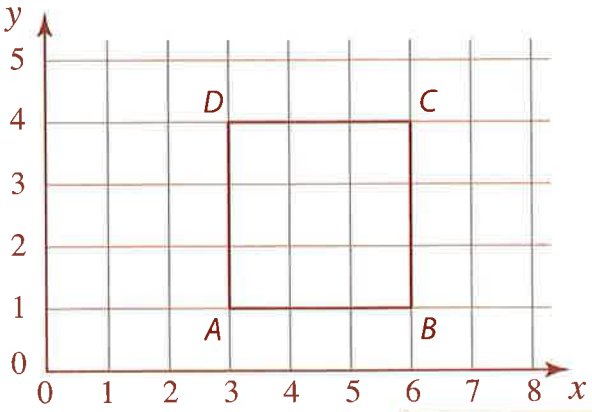
13. [Place Value] *

Estimate the perimeter of a rectangular yard 6.1 m by 7.7 m by first rounding to the nearest meter. ☐ m

14. [Patterns / Equations]

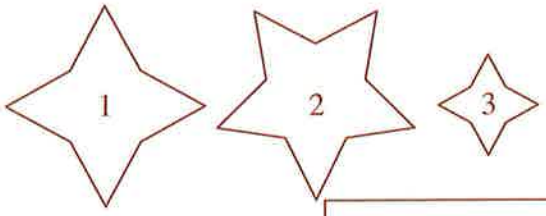
$\frac{1}{2}$ of ☐ $= 7$

15. [Location]
What is the perimeter in units of the square *ABCD*?



units

16. [Geometry]
Which two shapes are similar?



and

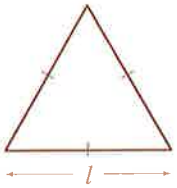
17. [Units of Measurement] *
How many meters tall is the Statue of Liberty (New York) if it is thirty times the height of a 154 cm person?

m

18. [Measuring] *
A lunar month is approximately 29 days, 12 hours and 44 minutes long. What is the time difference between a lunar month and the month of June?

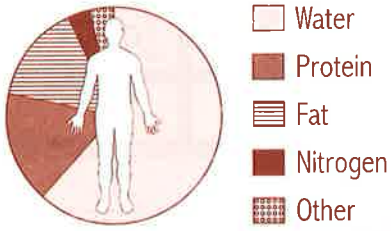
day h min

19. [Perimeter / Area / Volume] *
The perimeter of an equilateral triangle is 27 inches. Find the side length.

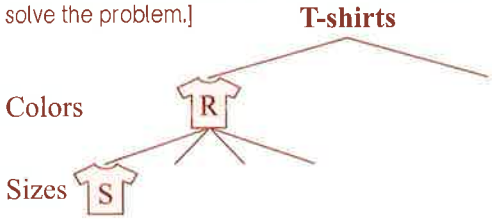


in.

20. [Data Analysis]
Protein makes up about 15% of the human body. Of the other components which substance makes up about 15%?



21. [Probability / Statistics]
The school shop is selling T-shirts. They come in two colors, red and navy. There are four sizes to choose from: small, medium, large and extra-large. How many combinations of T-shirts are available? [Complete the tree diagram to help you solve the problem.]



22. [Problem Solving 1] *
Which deal costs less per yard?
A) $1.50 for 15 yd
B) $5 for 45 yd

23. [Problem Solving 2] *
When Tony has his birthday tomorrow, his age in months will be the same as his grandfather's age in years. How old will Tony be if their combined ages will be 78?

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 2\square 6 \\ \times \quad 3 \\ \hline \square 3 \square \end{array}$$

MATH'S MATE

Term 4 - Sheet 7

RED

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	19	10	15	7	31	24	38	22	33	16
+ 7										

2. [– Whole Numbers to 10]

	18	15	19	12	14	10	27	33	11	26
– 6										

3. [× Whole Numbers to 12]

	10	6	4	5	12	2	7	11	8	9
× 11										

4. [÷ Whole Numbers to 12]

	144	108	36	72	96	12	132	84	60	120
÷ 12										

MAGIC NUMBERS

- Think of a number from 2 to 10.
- Multiply it by 9
- Add the two digits
- Subtract 5
- If your answer is 1, think of the letter A; if it is 2 think of the letter B and so on.
- Think of a country that begins with this letter.
- Think of the next letter in the alphabet.
- Think of a large animal that begins with this letter.
- Think of the color of this animal.
- Are you thinking of a large gray elephant from Denmark?

5. [Large Number +,–]

$$\begin{array}{r} 612 \\ 65 \\ 987 \\ +\ \ 23 \\ \hline \square \end{array}$$

6. [Large Number ×,÷]

$$\square$$

$$7\overline{)1715}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 80 \\ \times 1000 \\ \hline \square \end{array}$$

8. [Decimals]

$$\begin{array}{r} 4.52 \\ \times\ \ 2 \\ \hline \square \end{array}$$

9. [Fractions]

Of the 36 videos on the shelf, one fourth are comedies. How many are comedies? ☐

10. [Decimals / Fractions / Percents] *

You have a stamp collection of 400 stamps. 300 stamps are from Canada. What percent is this? ☐ %

11. [Integers]

$6^2 = 6 \times 6 =$ ☐

12. [Operations] *

$29 - (3 + 8) \times 2 =$ ☐

13. [Place Value] *

Estimate the total cost by rounding to the nearest dollar:

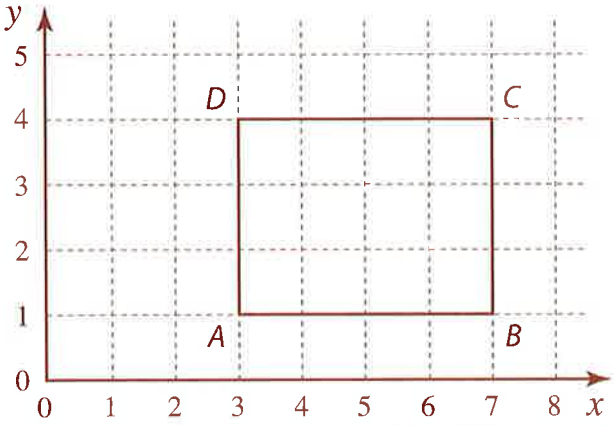
$12.15 + $4.05 + $7.75 + $6.55

$ ☐

14. [Patterns / Equations]

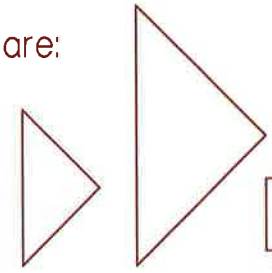
☐ + 39 = 87

15. [Location]
What is the perimeter in units of the rectangle *ABCD*?



units

16. [Geometry]
These triangles are:
A) congruent,
B) similar or
C) neither.

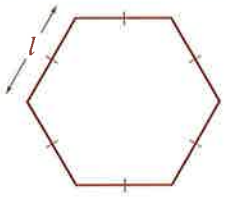


17. [Units of Measurement] *
The average uncooked potato has a mass of 6 ounces. How many potatoes would you expect to find in a 3 pound bag?

18. [Measuring] *
As of May 2005, Australian swimmer Grant Hackett's world record for the 1500 m race was 14:34.56 (14 min, 34.56 s). How much slower was his Olympic record time set in Beijing (2008) of 14:38.92 minutes?

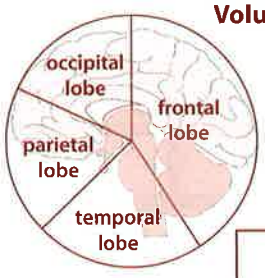
s

19. [Perimeter / Area / Volume] *
The perimeter of a regular hexagon is 120 ft. Find the side length.

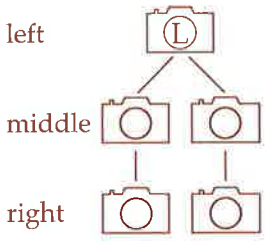


ft

20. [Data Analysis]
Which lobe of the brain is closest to twice the volume of the parietal lobe?



21. [Probability / Statistics]
In how many ways can Lisa, Amelia and Sophie be arranged for a group photo? [Complete the tree diagram to help you solve the problem.]



22. [Problem Solving 1] *
Which deal costs less per gallon?
A) $32 for 4 gal
B) $8.50 for 1 gal

23. [Problem Solving 2] *
A square has a perimeter of 60 inches. A rectangle is the shape of two of these squares placed side by side. What is the perimeter of the rectangle?

in.

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 4\square 7 \\ \times \quad 2\square \\ \hline 3\square 5\square \\ \square 1\square 0 \\ \hline \square\square\square\square 6 \end{array}$$

MATH'S MATE

Term 4 - Sheet 8

RED

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	38	5	13	30	7	21	36	4	29	32
+ 8										

2. [– Whole Numbers to 10]

	6	13	34	12	40	8	7	11	15	29
– 4										

3. [× Whole Numbers to 12]

	7	12	8	9	6	1	4	11	3	5
× 9										

4. [÷ Whole Numbers to 12]

	25	10	55	50	15	35	30	20	60	40
÷ 5										

SPECIAL NUMBERS

Adding 1 to the product of 4 consecutive numbers always gives a square number.

(e.g. $3 \times 4 \times 5 \times 6 + 1 = 19^2$)

ALSO:

Adding 1 to the product of the first and last numbers (3×6) + 1 always gives the number that is being squared.
In this example it is 19.

5. [Large Number +,–]

$$\begin{array}{r} 6518 \\ 144 \\ +\ 2970 \\ \hline \square \end{array}$$

6. [Large Number ×,÷]

$$\square \overline{)\ 9342}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 570 \\ \times\ 1000 \\ \hline \square \end{array}$$

8. [Decimals]

$$\begin{array}{r} 16.2 \\ \times\ \ 4 \\ \hline \square \end{array}$$

9. [Fractions] *

Two fifths of the $500 raised by the school is collected by room 6G. How much money does 6G raise?

$ ____

10. [Decimals / Fractions / Percents] *

By the age of 2 a child is about 50% of his adult height. How tall was the 2-year old whose adult height is 6 ft 2 in?

ft ____ in. ____

11. [Integers]

$5^2 = 5 \times$ ____

12. [Operations] *

$14 + 28 \div (9 - 2) =$ ____

13. [Place Value] *

Effie swam 2.2 miles, rode her bike 13.6 miles and ran 4.1 miles. Estimate the total distance traveled by rounding to the nearest mile.

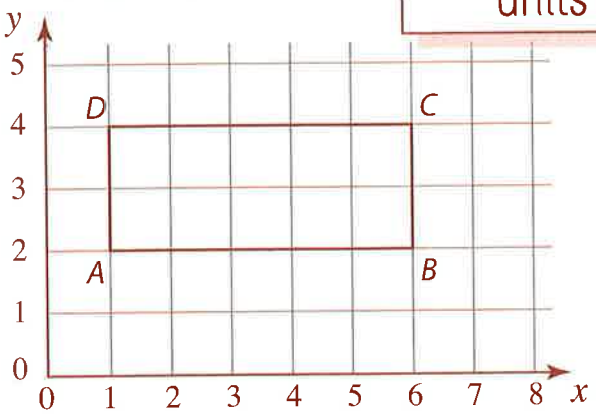
____ mi

14. [Patterns / Equations]

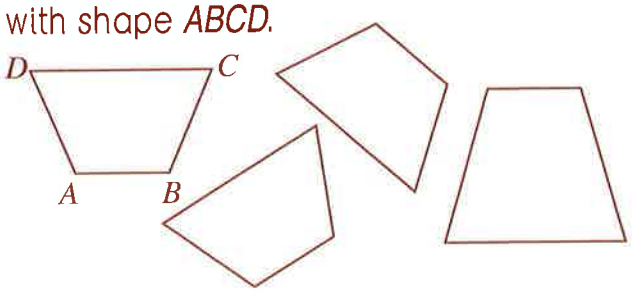
$\frac{1}{2}$ of ____ = 19

15. [Location]
What is the perimeter in units of rectangle *ABCD*?

units



16. [Geometry]
Circle the shape that is **not** congruent with shape *ABCD*.



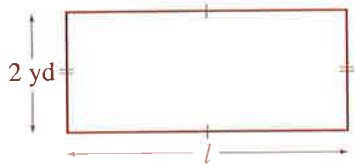
17. [Units of Measurement] *
A typical person has 100,000 strands of hair on his head. Suppose each strand is 50 cm long. How many kilometers of scalpal hair would the typical person have?

km

18. [Measuring] *
The Olympic records for the men's athletics events of 100 m and 200 m sprint are 9.69 s and 19.30 s respectively. Both were set in Beijing in 2008 by Usain Bolt (JAM). What is the difference in time between the two records?

s

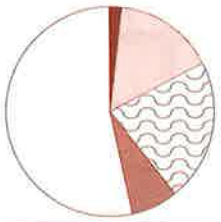
19. [Perimeter / Area / Volume] *
The perimeter of a rectangle is 14 yd. If the width is 2 yd, find its length.



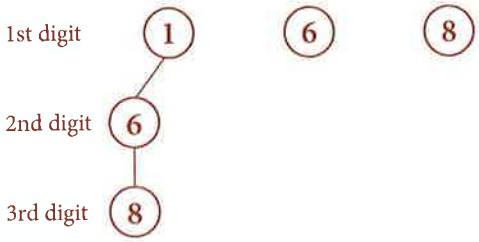
yd

20. [Data Analysis]
Which lake holds closest to one quarter of the total volume of water in the Great Lakes?

Volume of water in the Great Lakes



21. [Probability / Statistics]
How many different three-digit numbers can be made using the digits 1, 6 and 8 once each? [Complete the tree diagram to help you solve the problem.]



22. [Problem Solving 1] *
Which deal costs less per ounce?
A) 75¢ for 8 oz
B) $2 for 2 lb

23. [Problem Solving 2] *
At the 2008 Olympics a sports commentator said: "USA is one of the 16 countries with the maximum allowed 3 runners. All together there are 103 runners representing 60 countries." How many countries have 2 runners?

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 1\square 4 \\ \times \quad 8 \\ \hline \square 9\square \end{array}$$

For skill builder help go to www.mathsmate.net

MATH'S MATE

Term 4 - Sheet 1

RED

Name:

Due Date: / /

Parent's Signature:

1. [+ Whole Numbers to 10]

	24	9	33	11	30	7	18	12	6	25
+6	30	15	39	17	36	13	24	18	12	31

2. [− Whole Numbers to 10]

	12	9	18	17	10	34	13	41	26	55
−7	5	2	11	10	3	27	6	34	19	48

3. [× Whole Numbers to 12]

	3	6	2	9	7	12	10	5	4	8
×8	24	48	16	72	56	96	80	40	32	64

4. [÷ Whole Numbers to 12]

	40	15	25	60	45	5	55	30	35	20
÷5	8	3	5	12	9	1	11	6	7	4

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

48 x 362 = 17,376

Check:

(4+8) x (3+6+2) = 1+7+3+7+6

12 x 11 = 24

(1+2) x (1+1) = 2+4

3 x 2 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 46 x 129 = 5934

b) 199 x 1997 = 97,403

Answers: a) may be correct, b) definitely wrong

5. [Large Number +,−]

$$\begin{array}{r} 1000 \\ -\ 243 \\ \hline 757 \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 89 \\ \times 74 \\ \hline 356 \\ 6230 \\ \hline 6586 \end{array}$$

7. [Powers of 10 ×,÷]

20,900 ÷ 100 =

209

8. [Decimals]

$$\begin{array}{r} 5.31 \\ -\ 0.87 \\ \hline 4.44 \end{array}$$

9. [Fractions]

$3\frac{1}{6} + 2\frac{4}{6} =$ $5\frac{5}{6}$

10. [Decimals / Fractions / Percents] *

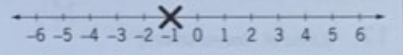
Which ratio forms a proportion with $\frac{1}{2}$?

A) $\frac{7}{7}$ B) $\frac{6}{10}$ C) $\frac{1}{12}$ D) $\frac{4}{8}$

D

11. [Integers]

Mark with a cross the number that is 2 to the right of −3.



12. [Operations] *

23 − 8 + 4 + 5 = 24

13. [Place Value] *

Estimate the sum of the decimals 5.08 and 6.9 by rounding to the nearest whole number before adding. 12

14. [Patterns / Equations]

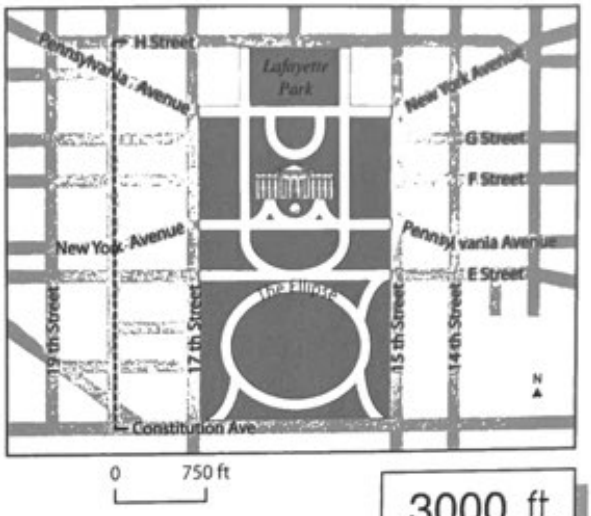
Complete the table:

☆ Patterns

No. of stars	1	2	3	4
No. of points	5	10	15	20

15. [Location] *

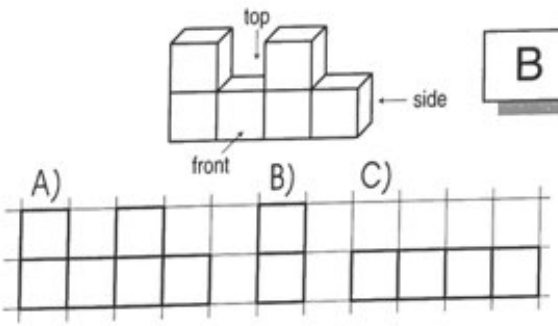
What is the distance along 18th Street from H Street to Constitution Avenue?



3000 ft

16. [Geometry]

Which of the shapes below is the side view of this solid?



B

17. [Units of Measurement] *

Write in quarts:

3 gal = 12 qt

18. [Measuring] *

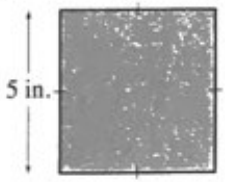
The flight to Los Angeles was scheduled for 8:45 A.M. but was delayed 95 minutes due to fog on the runway. What time did the flight leave?

10:20 A.M.

19. [Perimeter / Area / Volume] *

Find the area of this square.

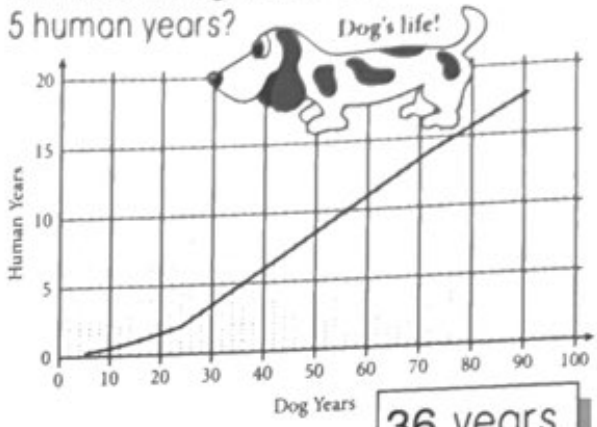
[Area = length × length]



25 in.^{2}

20. [Data Analysis]

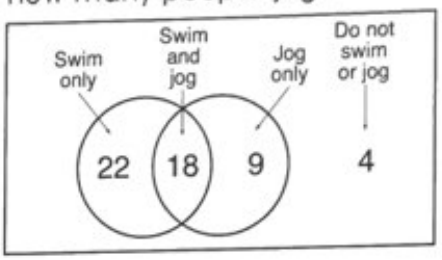
How old, in dog years, is your dog after 5 human years?



36 years

21. [Probability / Statistics]

How many people jog?



27

22. [Problem Solving 1]

Fill in the missing number.

$12 \times$ 3 $= 36$

23. [Problem Solving 2] *

Complete the magic square.

[Hint: Every row, column and diagonal has the same sum.]

4	11	3
5	6	7
9	1	8

24. [Problem Solving 3]

Fill in the appropriate numbers for the titles of the 5 famous stories below. Now add the 5 numbers.

	Hundreds	Tens	Units	
Ali Baba and the		4	0	Thieves
	1	0	1	Dalmatians
The			3	Musketeers
Around the World in		8	0	Days
Snow White and the			7	Dwarfs
TOTAL	2	3	1	

For skill builder help go to www.mathsmate.net

MATH'S MATE

Term 4 - Sheet 2

RED

Name: _____

Due Date: ___/___/___

Parent's Signature: _____

1. [+ Whole Numbers to 10]

	14	32	19	10	15	28	7	13	31	16
+4	18	36	23	14	19	32	11	17	35	20

2. [− Whole Numbers to 10]

	11	26	8	5	12	33	14	9	40	7
−3	8	23	5	2	9	30	11	6	37	4

3. [× Whole Numbers to 12]

	9	7	1	6	5	12	4	11	3	10
×5	45	35	5	30	25	60	20	55	15	50

4. [÷ Whole Numbers to 12]

	64	40	88	16	72	56	24	32	96	48
÷8	8	5	11	2	9	7	3	4	12	6

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

46 × 92 × 39 = 165,048

Check: (9's can be thrown out)

(4+6) × 2 × 3 = 1+6+5+0+4+8

10 × 2 × 3 = 24

1 × 2 × 3 = 2+4

2 × 3 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 21 × 85 × 37 = 69,045

b) 220 × 209 = 45,980

Answers: a) definitely wrong, b) may be correct

5. [Large Number +,−]

$$\begin{array}{r} 4205 \\ -\,2174 \\ \hline 2031 \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 64 \\ \times\,59 \\ \hline 576 \\ 3200 \\ \hline 3776 \end{array}$$

7. [Powers of 10 ×,÷]

$3100 \div 10 =$ **310**

8. [Decimals]

$$\begin{array}{r} 98.45 \\ -\,23.76 \\ \hline 74.69 \end{array}$$

9. [Fractions]

$4\frac{5}{10} + 3\frac{2}{10} =$ $7\frac{7}{10}$

10. [Decimals / Fractions / Percents] *

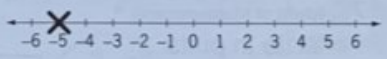
Which ratio forms a proportion with $\frac{3}{4}$?

A) $\frac{3}{8}$ B) $\frac{12}{16}$ C) $\frac{1}{12}$ D) $\frac{7}{8}$

B

11. [Integers]

Mark with a cross the number that is 4 to the left of −1.



12. [Operations] *

$16 - 4 + 7 - 3 =$ **16**

13. [Place Value] *

Estimate the difference between the decimals 24.4 and 14.8 by rounding to the nearest whole number before subtracting. **9**

14. [Patterns / Equations]

Complete the table:

Food Intake - Giant Panda

No. of days	1	2	3	4
Bamboo (lb)	30	60	90	120

15. [Location] *

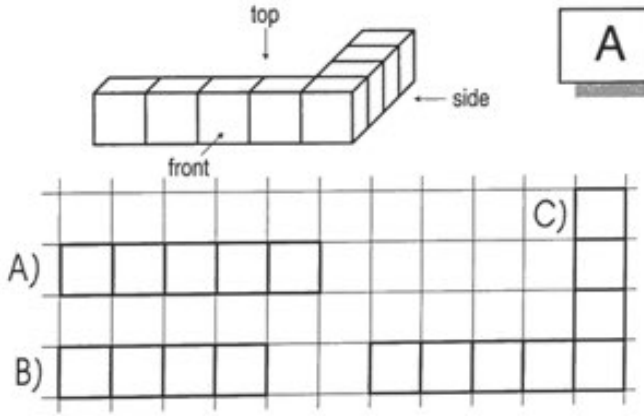
What is the distance in kilometers from Grand Rapids to Toronto?

500 km

16. [Geometry]

Which of the shapes below is the front view of this solid?

A



17. [Units of Measurement] *

Write in pints:

8 qt = 16 pt

18. [Measuring] *

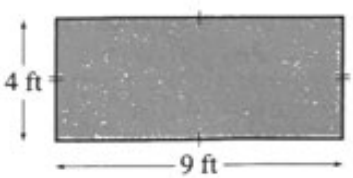
Teams in the Tour de France start at 5 minute intervals. The first team leaves at 2:15 P.M. There are 21 teams. At what time does the final team depart?

3 : 55 P.M.

19. [Perimeter / Area / Volume] *

Find the area of this rectangle.

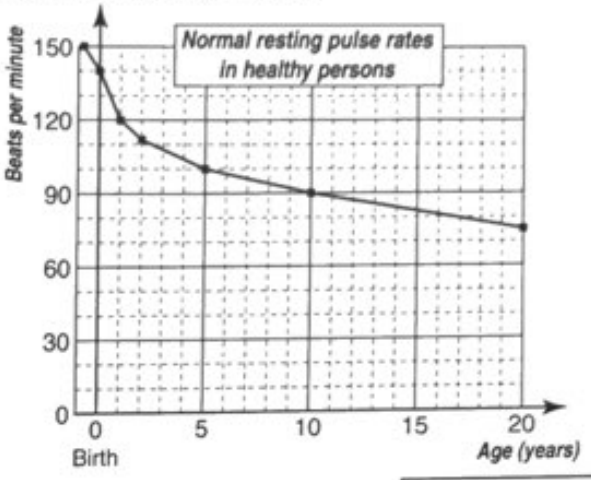
[Area = length × width]



36 ft²

20. [Data Analysis]

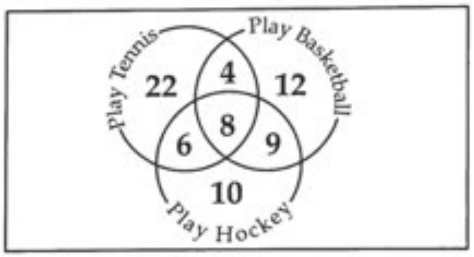
During which year of a young person's life does his resting pulse rate decrease the most?



1st year

21. [Probability / Statistics]

A total of forty students play tennis. How many of those students also play basketball and hockey?



8

22. [Problem Solving 1]

Fill in the missing number.

45 ÷ 5 = 9

23. [Problem Solving 2] *

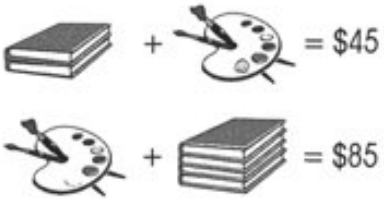
Complete the magic square.

[Hint: Every row, column and diagonal has the same sum.]

9	5	4
1	6	11
8	7	3

24. [Problem Solving 3] *

How much is one book?



$ 20

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MATH'S MATE

Term 4 - Sheet 3

RED

Name: _____

Due Date: ___/___/___

Parent's Signature: _____

1. [+ Whole Numbers to 10]

	33	20	29	8	31	24	12	35	17	6
+ 10	43	30	39	18	41	34	22	45	27	16

2. [– Whole Numbers to 10]

	14	22	30	15	16	17	38	13	21	19
– 8	6	14	22	7	8	9	30	5	13	11

3. [× Whole Numbers to 12]

	4	8	5	7	1	6	12	2	10	9
× 4	16	32	20	28	4	24	48	8	40	36

4. [÷ Whole Numbers to 12]

	70	28	14	56	35	63	42	84	77	21
÷ 7	10	4	2	8	5	9	6	12	11	3

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

$31 \times 104.8 = 3248.8$

Check:

$(3+1) \times (1+4+8) = 3+2+4+8+8$

$4 \times (1+3) = 2+5$

$4 \times 4 = 7$

$1+6 = 7$

Yes, the answer is probably correct.

Could these be correct?

a) $12.2 \times 16.5 = 201.3$

b) $4.05 \times 19.7 = 79.785$

Answers: a) may be correct, b) may be correct

5. [Large Number +,–]

$$\begin{array}{r} 3765 \\ -\ 896 \\ \hline 2869 \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 58 \\ \times 73 \\ \hline 174 \\ 4060 \\ \hline 4234 \end{array}$$

7. [Powers of 10 ×,÷]

$8000 \div 100 =$ **80**

8. [Decimals]

$$\begin{array}{r} 24.19 \\ -\ 13.85 \\ \hline 10.34 \end{array}$$

9. [Fractions]

$3 - \frac{2}{5} =$ $2\frac{3}{5}$

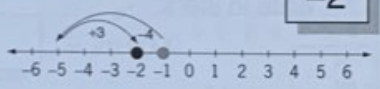
10. [Decimals / Fractions / Percents] *

The price of 4 pounds of grapes is $8.40

What is the price of 1 pound of grapes? **$ 2.10**

11. [Integers]

Start at –1. Move 4 to the left. Then move 3 to the right. At what number are you? **–2**



12. [Operations] *

$120 \div (5 \times 6) =$ **4**

13. [Place Value] *

Estimate the difference between the decimals 9.25 and 6.5 by rounding to the nearest whole number before subtracting. **2**

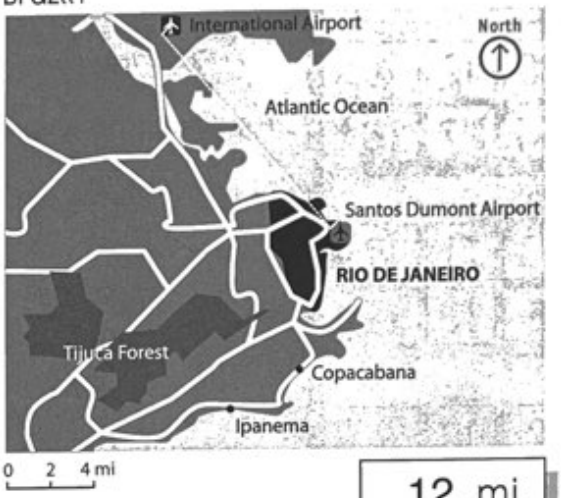
14. [Patterns / Equations]

Complete the table:

Kangaroo

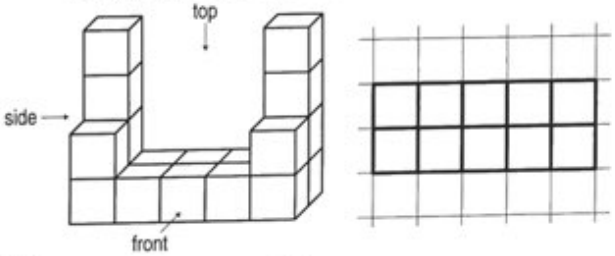
Speed (km/h)	10	15	20	25
Hop length (m)	1.2	1.8	2.4	3.0

15. [Location] *
How far is it from the Santos Dumont Airport to the International Airport in Brazil?



12 mi

16. [Geometry]
Draw the top view of this solid.

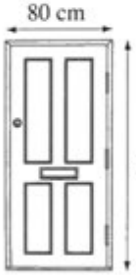


17. [Units of Measurement] *
Write in liters:
9000 mL = 9 L

18. [Measuring] *
The Sydney to Hobart Yacht Race starts at 1:10 P.M. Eighty minutes before this, other boats are excluded from the area. At what time must they be gone?

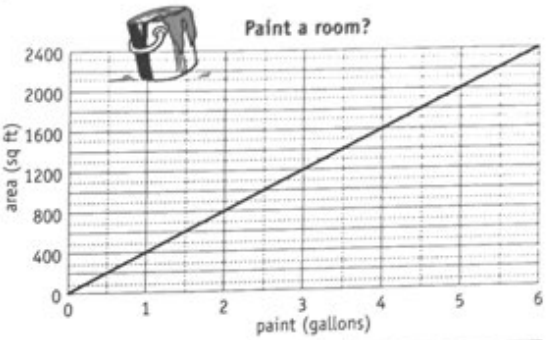
11:50 A.M.

19. [Perimeter / Area / Volume] *
Find the area of this door.



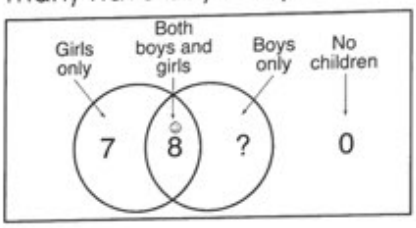
16,000 cm²

20. [Data Analysis]
How much paint would you need to paint 1400 square feet of wall area?



3.5 gal

21. [Probability / Statistics]
Twenty families were surveyed. How many have boys only?



5

22. [Problem Solving 1]
Fill in the missing number.
8 × 7 = 56

23. [Problem Solving 2] *
Complete the magic square.
[Hint: Every row, column and diagonal has the same sum.]

12	4	11
8	9	10
7	14	6

24. [Problem Solving 3] *
A bookshop sold 200 books in its first year of business. Since then sales have doubled every year. What was the bookshop's profit in the sixth year given the yearly profit formula below?

Yearly profit = books sold × $2 − $1000

$11,800

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MATH'S MATE

Term 4 - Sheet 4

Name: _____

Due Date: ___/___/___

Parent's Signature: _____

1. [+ Whole Numbers to 10]

	12	39	24	17	36	20	31	13	8	25
+2	14	41	26	19	38	22	33	15	10	27

2. [− Whole Numbers to 10]

	10	35	24	6	27	9	13	32	31	28
−4	6	31	20	2	23	5	9	28	27	24

3. [× Whole Numbers to 12]

	9	10	4	5	12	3	1	6	8	11
× 10	90	100	40	50	120	30	10	60	80	110

4. [÷ Whole Numbers to 12]

	11	7	6	3	2	8	5	10	9	12
÷1	11	7	6	3	2	8	5	10	9	12

DIVISION

(Check Your Answer)

e.g. Could this answer be correct?

45,980 / 209 = 220

Check: (9's can be thrown out)

(4+5+8) / 2 = 2+2

(1+7) / 2 = 4

8 / 2 = 4

Yes, the answer is probably correct.

Could these be correct?

a) 19,646 / 517 = 38

b) 3525 / 47 = 65

Answers: a) may be correct, b) definitely wrong

5. [Large Number +,−]

$$\begin{array}{r} 4382 \\ -\,3769 \\ \hline 613 \end{array}$$

6. [Large Number ×,÷]

$$\begin{array}{r} 77 \\ \times\,26 \\ \hline 462 \\ 1540 \\ \hline 2002 \end{array}$$

7. [Powers of 10 ×,÷]

50,000 ÷ 100 = 500

8. [Decimals]

$$\begin{array}{r} 57.08 \\ -\,45.96 \\ \hline 11.12 \end{array}$$

9. [Fractions]

$2 - \frac{2}{3} = 1\frac{1}{3}$

10. [Decimals / Fractions / Percents] *

Which is cheaper per apple?

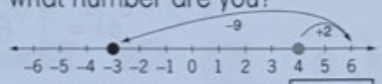
A) $1.80 for 4 apples

B) $2.10 for 5 apples

B

11. [Integers]

Start at 4. Move 2 to the right. Then move 9 to the left. At what number are you?



−3

12. [Operations] *

(19 − 12) × 5 = 35

13. [Place Value] *

Estimate the sum of the decimals 10.38 and 4.71 by rounding to the nearest whole number before adding. 15

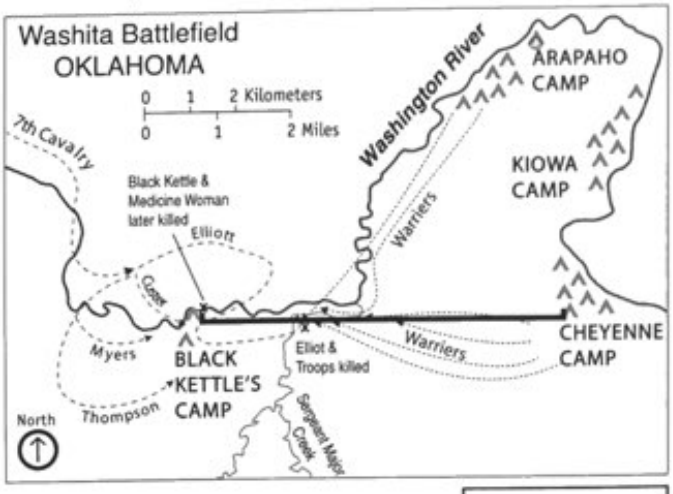
14. [Patterns / Equations]

Complete the table:

Timetable

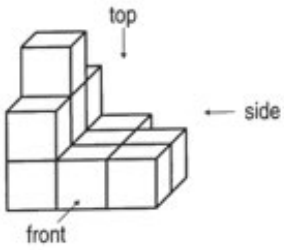
Period	1	2	3	4
Starting time	8:25	9:10	9:55	10:40

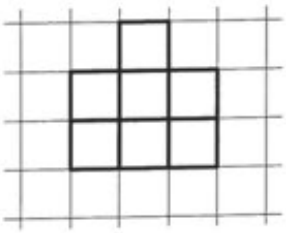
15. [Location] *
What is the distance in miles from the Cheyenne camp to Black Kettle's camp?



5 mi

16. [Geometry]
Draw the side view of this solid.





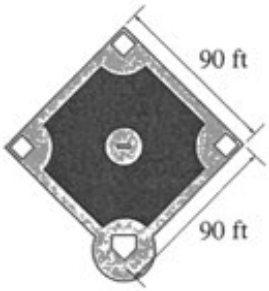
17. [Units of Measurement] *
Write in milliliters:

6 L = 6000 mL

18. [Measuring] *
The exam started at 11:20 A.M. After 1 hour and 20 minutes Billy finished and left the room. He left 15 minutes before me. At what time did I leave the exam room?

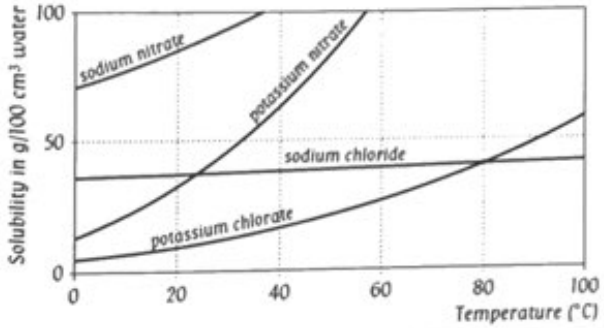
12:55 P.M.

19. [Perimeter / Area / Volume] *
Find the area of this baseball infield.



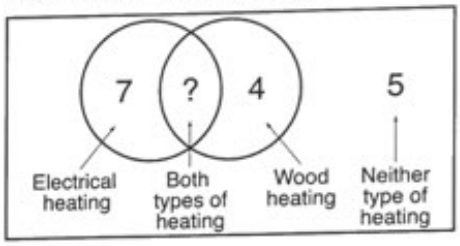
8100 ft²

20. [Data Analysis]
At what temperature is the solubility of sodium chloride and potassium chlorate the same?



80 °C

21. [Probability / Statistics] *
How many of the 20 families surveyed have both electrical and wood heating?



4

22. [Problem Solving 1]
Fill in the missing number.

36 ÷ 9 = 4

23. [Problem Solving 2] *
Complete the magic square.
[Hint: Every row, column and diagonal has the same sum.]

12	16	17
20	15	10
13	14	18

24. [Problem Solving 3]
Fill in the crosswords about time to reveal the name for a long interval of time in the vertical box.

Hangs on a wall — clock
7 days — week
3600 every hour — second
On your wrist — watch
60 seconds — minute
60 minutes — hour
1440 minutes — day

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MATH'S MATE

Term 4 - Sheet 5

RED

Name: _____

Due Date: ___/___/___

Parent's Signature: _____

1. [+ Whole Numbers to 10]

	37	20	5	28	16	23	12	31	14	9
+ 5	42	25	10	33	21	28	17	36	19	14

2. [– Whole Numbers to 10]

	11	17	36	13	14	48	15	20	29	32
– 10	1	7	26	3	4	38	5	10	19	22

3. [× Whole Numbers to 12]

	3	6	9	11	7	2	10	5	4	8
× 12	36	72	108	132	84	24	120	60	48	96

4. [÷ Whole Numbers to 12]

	110	44	77	88	11	99	66	132	121	33
÷ 11	10	4	7	8	1	9	6	12	11	3

MAGIC NUMBERS

- Take any 4-digit number with 4 different digits. (e.g. 3, 1, 7 & 9)
- Make the largest number you can. (9731)
- Then make the smallest number you can. (1379)
- Subtract it from your large number.

  9731 – 1379 = 8352
- Now take this answer and repeat the process. (8532 – 2358)

  (If your answer has only 3 digits, place a zero at the front.)
- What number will you always end up with?

Answer: 6174

5. [Large Number +,–]

$$\begin{array}{r} 1679 \\ +\ 840 \\ \hline 2519 \end{array}$$

6. [Large Number ×,÷]

1155

$8\overline{)9240}$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 360 \\ \times\ 10 \\ \hline 3600 \end{array}$$

8. [Decimals]

$$\begin{array}{r} 12.1 \\ \times\ 4 \\ \hline 48.4 \end{array}$$

9. [Fractions]

Of the 18 plants in the garden, one third are roses. How many are roses? 6

10. [Decimals / Fractions / Percents] *

Two of the four Beatles were left handed. What percent is this? 50%

11. [Integers]

Which number is not a square number?

A) 4 B) 6 C) 9

B

12. [Operations] *

6 – (18 – 13) + 3 = 4

13. [Place Value] *

Estimate the total cost by rounding each amount to the nearest hundred before adding:

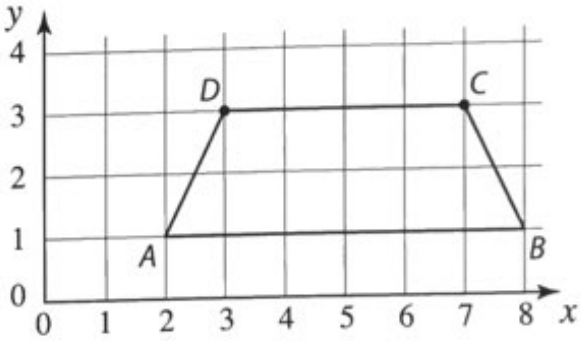
$79.00 + $96.00 + $309.00 + + $112.00

$ 600.00

14. [Patterns / Equations]

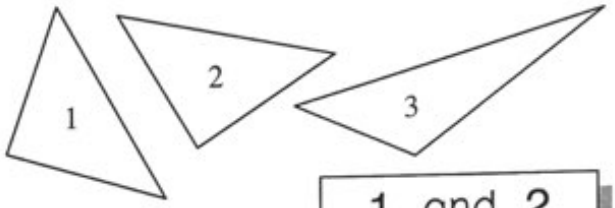
46 + 46 = 92

15. [Location]
What is the length in units of segment $\overline{CD}$?



4 units

16. [Geometry]
Which two triangles are congruent?



1 and 2

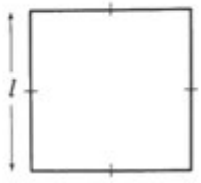
17. [Units of Measurement] *
How many 5000 L water tanks are necessary to fill a 30,000 L swimming pool?

6

18. [Measuring] *
The Olympic record for the men's 1500 m athletics race was set by Noah Ngeny - Kenya (Sydney 2000) at 3:32.07 (3 min, 32.07 s). How many seconds behind El Guerrouj's world record (1998) of 3:26.00 was he?

6.07 s

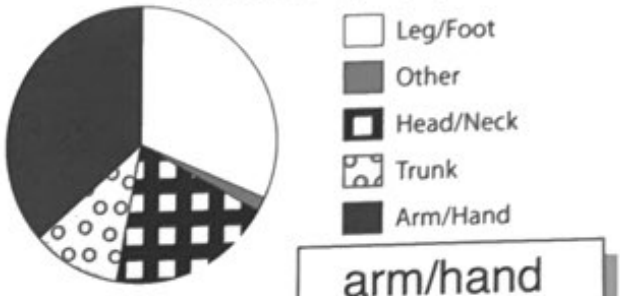
19. [Perimeter / Area / Volume] *
The perimeter of a square is 40 ft. Find the side length.



10 ft

20. [Data Analysis]
On which part of the body is a 10 to 14 year old most likely to be bitten by a dog?

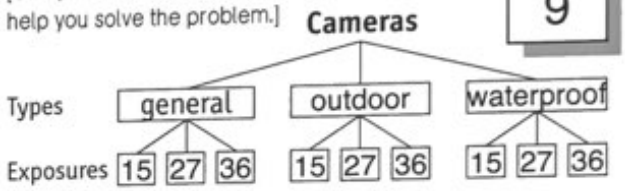
Dog Bite Injuries: 10 - 14 yr. olds
(as treated in emergency departments)



arm/hand

21. [Probability / Statistics]
A store is selling general, outdoor and waterproof disposable cameras. Each type comes with 15, 27 and 36 exposures. How many combinations of disposable cameras are available?
[Complete the tree diagram to help you solve the problem.]

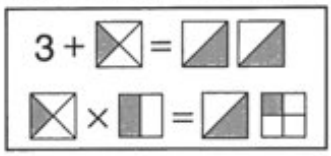
9



22. [Problem Solving 1] *
Which deal costs less per ounce?
A) \$5 for 50 oz
B) \$3 for 25 oz

A

23. [Problem Solving 2] *
Each flag represents a different digit. Can you find the solution to the cipher?



◪=1 , ☒=8 , ◧=2 , ⊞=6

24. [Problem Solving 3]
Fill in the missing digits, using the digits 1 to 9.

$$\begin{array}{r} 1\,\boxed{5}\,9 \\ \times\quad\;\; 6 \\ \hline \boxed{9}\,5\,\boxed{4} \end{array}$$

MATH'S MATE

Term 4 - Sheet 6

RED

Name:

Due Date: / /

Parent's Signature:

1. [+ Whole Numbers to 10]

	16	32	25	11	39	30	23	17	24	18
+9	25	41	34	20	48	39	32	26	33	27

2. [− Whole Numbers to 10]

	14	12	30	15	16	17	28	13	11	19
−8	6	4	22	7	8	9	20	5	3	11

3. [× Whole Numbers to 12]

	4	11	2	9	10	5	8	12	6	7
×6	24	66	12	54	60	30	48	72	36	42

4. [÷ Whole Numbers to 12]

	110	80	90	30	70	10	50	100	40	120
÷10	11	8	9	3	7	1	5	10	4	12

MOEBIUS MAGIC

A Mathematician confided,
That a Moebius band
is one sided,
And you'll get quite a laugh,
if you cut one in half,
for it stays in one piece
when divided!

- Draw a line down the middle of a long strip of paper.
- Make one twist in the strip and glue the ends together to form a band.
- Cut the band along the line you drew down the middle of your strip.
- Try with no twists.
- Try with two twists.

5. [Large Number +,−]

$$\begin{array}{r} 4212 \\ 1045 \\ +\,2835 \\ \hline 8092 \end{array}$$

6. [Large Number ×,÷]

$$6\overline{)7350} = 1225$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 900 \\ \times\,100 \\ \hline 90{,}000 \end{array}$$

8. [Decimals]

$$\begin{array}{r} 24.2 \\ \times\quad 3 \\ \hline 72.6 \end{array}$$

9. [Fractions] *

Three quarters of the 12 farms breed cattle. How many farms breed cattle? **9**

10. [Decimals / Fractions / Percents] *

Five of the top twenty baby names were the same in 1880 as they were in 2010. What percent of names were the same? **25%**

11. [Integers]

$2^2 = 2 \times 2 =$ **4**

12. [Operations] *

$17 + 16 - (23 - 14) =$ **24**

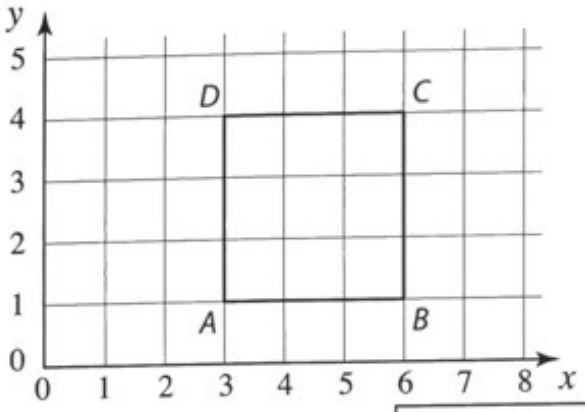
13. [Place Value] *

Estimate the perimeter of a rectangular yard 6.1 m by 7.7 m by first rounding to the nearest meter. **28 m**

14. [Patterns / Equations]

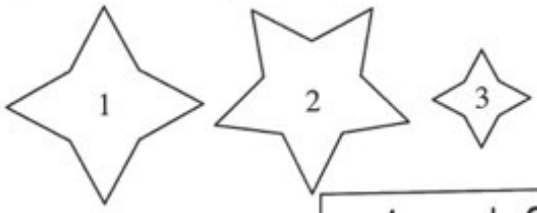
$\frac{1}{2}$ of **14** $= 7$

15. [Location]
What is the perimeter in units of the square *ABCD*?



12 units

16. [Geometry]
Which two shapes are similar?



1 and 3

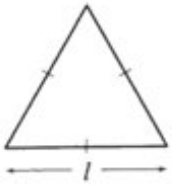
17. [Units of Measurement] *
How many meters tall is the Statue of Liberty (New York) if it is thirty times the height of a 154 cm person?

46.2 m

18. [Measuring] *
A lunar month is approximately 29 days, 12 hours and 44 minutes long. What is the time difference between a lunar month and the month of June?

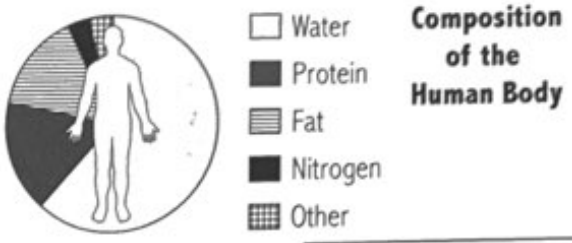
0 day 11 h 16 min

19. [Perimeter / Area / Volume] *
The perimeter of an equilateral triangle is 27 inches. Find the side length.



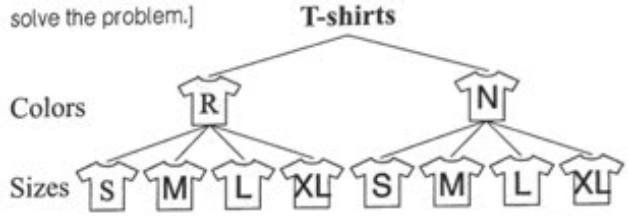
9 in.

20. [Data Analysis]
Protein makes up about 15% of the human body. Of the other components which substance makes up about 15%?



fat

21. [Probability / Statistics]
The school shop is selling T-shirts. They come in two colors, red and navy. There are four sizes to choose from: small, medium, large and extra-large. How many combinations of T-shirts are available? [Complete the tree diagram to help you solve the problem.]



8

22. [Problem Solving 1] *
Which deal costs less per yard?
A) $1.50 for 15 yd
B) $5 for 45 yd

A

23. [Problem Solving 2] *
When Tony has his birthday tomorrow, his age in months will be the same as his grandfather's age in years. How old will Tony be if their combined ages will be 78?

6

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 2\,\boxed{4}\,6 \\ \times \qquad 3 \\ \hline \boxed{7}\,3\,\boxed{8} \end{array}$$

MATH'S MATE

Term 4 - Sheet 7

Name: _____

Due Date: ___/___/___

Parent's Signature: _____

1. [+ Whole Numbers to 10]

	19	10	15	7	31	24	38	22	33	16
+7	26	17	22	14	38	31	45	29	40	23

2. [– Whole Numbers to 10]

	18	15	19	12	14	10	27	33	11	26
–6	12	9	13	6	8	4	21	27	5	20

3. [× Whole Numbers to 12]

	10	6	4	5	12	2	7	11	8	9
×11	110	66	44	55	132	22	77	121	88	99

4. [÷ Whole Numbers to 12]

	144	108	36	72	96	12	132	84	60	120
÷12	12	9	3	6	8	1	11	7	5	10

MAGIC NUMBERS

- Think of a number from 2 to 10.
- Multiply it by 9
- Add the two digits
- Subtract 5
- If your answer is 1, think of the letter A; if it is 2 think of the letter B and so on.
- Think of a country that begins with this letter.
- Think of the next letter in the alphabet.
- Think of a large animal that begins with this letter.
- Think of the color of this animal.
- Are you thinking of a large gray elephant from Denmark?

5. [Large Number +,–]

$$\begin{array}{r} 612 \\ 65 \\ 987 \\ +\ 23 \\ \hline 1687 \end{array}$$

6. [Large Number ×,÷]

245

$7\overline{)1715}$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 80 \\ \times 1000 \\ \hline 80{,}000 \end{array}$$

8. [Decimals]

$$\begin{array}{r} 4.52 \\ \times\ \ 2 \\ \hline 9.04 \end{array}$$

9. [Fractions]

Of the 36 videos on the shelf, one fourth are comedies. How many are comedies? 9

10. [Decimals / Fractions / Percents] *

You have a stamp collection of 400 stamps. 300 stamps are from Canada. What percent is this? 75%

11. [Integers]

$6^2 = 6 \times 6 =$ 36

12. [Operations] *

$29 - (3 + 8) \times 2 =$ 7

13. [Place Value] *

Estimate the total cost by rounding to the nearest dollar:

$12.15 + $4.05 + $7.75 + $6.55

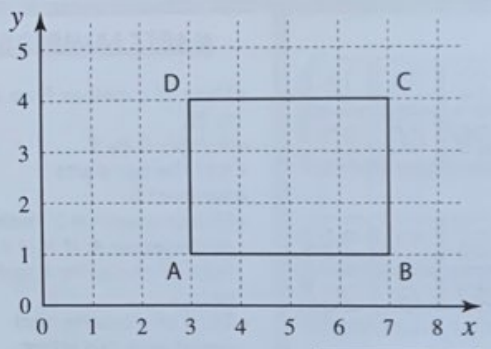
$ 31.00

14. [Patterns / Equations]

48 + 39 = 87

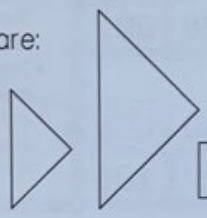
For skill builder help go to www.mathsmate.net

15. [Location]
What is the perimeter in units of the rectangle *ABCD*?



14 units

16. [Geometry]
These triangles are:
A) congruent,
B) similar or
C) neither.



B

17. [Units of Measurement] *
The average uncooked potato has a mass of 6 ounces. How many potatoes would you expect to find in a 3 pound bag?

8

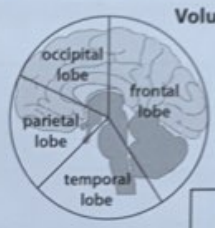
18. [Measuring] *
As of May 2005, Australian swimmer Grant Hackett's world record for the 1500 m race was 14:34.56 (14 min, 34.56 s). How much slower was his Olympic record time set in Beijing (2008) of 14:38.92 minutes?

4.36 s

19. [Perimeter / Area / Volume] *
The perimeter of a regular hexagon is 120 ft. Find the side length.

20 ft

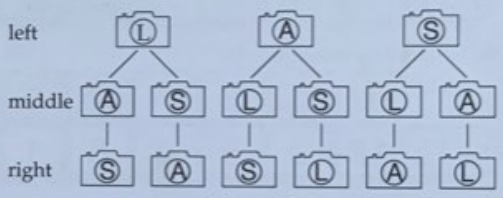
20. [Data Analysis]
Which lobe of the brain is closest to twice the volume of the parietal lobe?



frontal lobe

21. [Probability / Statistics]
In how many ways can Lisa, Amelia and Sophie be arranged for a group photo? [Complete the tree diagram to help you solve the problem.]

6



22. [Problem Solving 1] *
Which deal costs less per gallon?
A) $32 for 4 gal
B) $8.50 for 1 gal

A

23. [Problem Solving 2] *
A square has a perimeter of 60 inches. A rectangle is the shape of two of these squares placed side by side. What is the perimeter of the rectangle?

90 in.

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 4\,\boxed{5}\,7 \\ \times\quad 2\,\boxed{8} \\ \hline 3\,\boxed{6}\,5\,\boxed{6} \\ \boxed{9}\,1\,\boxed{4}\,0 \\ \hline \boxed{1}\,\boxed{2}\,\boxed{7}\,\boxed{9}\,6 \end{array}$$

MATH'S MATE

Term 4 - Sheet 8

Name:

Due Date: / /

Parent's Signature:

1. [+ Whole Numbers to 10]

	38	5	13	30	7	21	36	4	29	32
+8	46	13	21	38	15	29	44	12	37	40

2. [− Whole Numbers to 10]

	6	13	34	12	40	8	7	11	15	29
−4	2	9	30	8	36	4	3	7	11	25

3. [× Whole Numbers to 12]

	7	12	8	9	6	1	4	11	3	5
×9	63	108	72	81	54	9	36	99	27	45

4. [÷ Whole Numbers to 12]

	25	10	55	50	15	35	30	20	60	40
÷5	5	2	11	10	3	7	6	4	12	8

SPECIAL NUMBERS

Adding 1 to the product of 4 consecutive numbers always gives a square number.

(e.g. $3 \times 4 \times 5 \times 6 + 1 = 19^2$)

ALSO:

Adding 1 to the product of the first and last numbers $(3 \times 6) + 1$ always gives the number that is being squared.
In this example it is 19.

5. [Large Number +,−]

$$\begin{array}{r} 6518 \\ 144 \\ +2970 \\ \hline 9632 \end{array}$$

6. [Large Number ×,÷]

$$9\overline{)9342} = 1038$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 570 \\ \times 1000 \\ \hline 570{,}000 \end{array}$$

8. [Decimals]

$$\begin{array}{r} 16.2 \\ \times \quad 4 \\ \hline 64.8 \end{array}$$

9. [Fractions] *

Two fifths of the $500 raised by the school is collected by room 6G. How much money does 6G raise? $200

10. [Decimals / Fractions / Percents] *

By the age of 2 a child is about 50% of his adult height. How tall was the 2-year old whose adult height is 6 ft 2 in? 3 ft 1 in.

11. [Integers]

$5^2 = 5 \times 5$

12. [Operations] *

$14 + 28 \div (9 - 2) = 18$

13. [Place Value] *

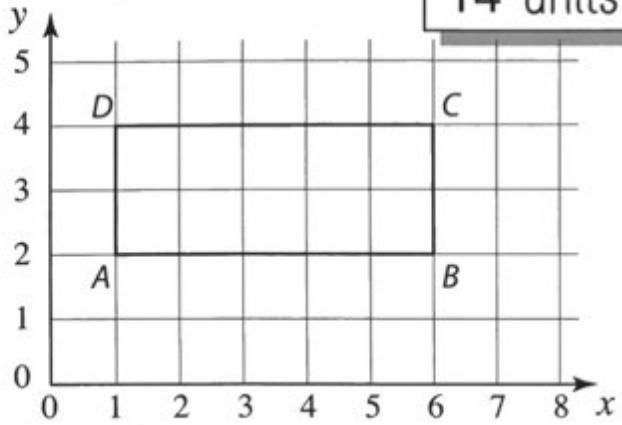
Effie swam 2.2 miles, rode her bike 13.6 miles and ran 4.1 miles. Estimate the total distance traveled by rounding to the nearest mile. 20 mi

14. [Patterns / Equations]

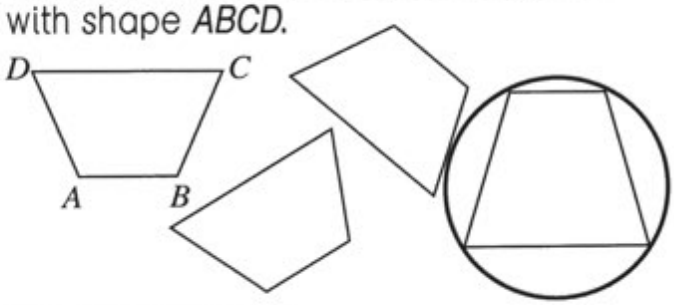
$\frac{1}{2}$ of 38 $= 19$

15. [Location]
What is the perimeter in units of rectangle *ABCD*?

14 units



16. [Geometry]
Circle the shape that is **not** congruent with shape *ABCD*.



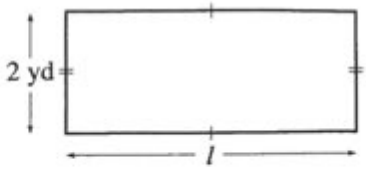
17. [Units of Measurement] *
A typical person has 100,000 strands of hair on his head. Suppose each strand is 50 cm long. How many kilometers of scalpal hair would the typical person have?

50 km

18. [Measuring] *
The Olympic records for the men's athletics events of 100 m and 200 m sprint are 9.69 s and 19.30 s respectively. Both were set in Beijing in 2008 by Usain Bolt (JAM). What is the difference in time between the two records?

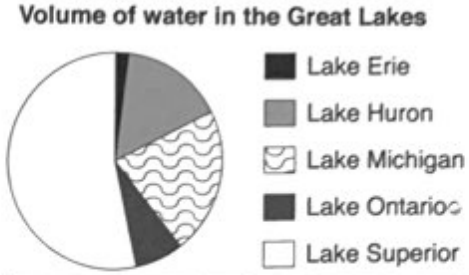
9.61 s

19. [Perimeter / Area / Volume] *
The perimeter of a rectangle is 14 yd. If the width is 2 yd, find its length.



5 yd

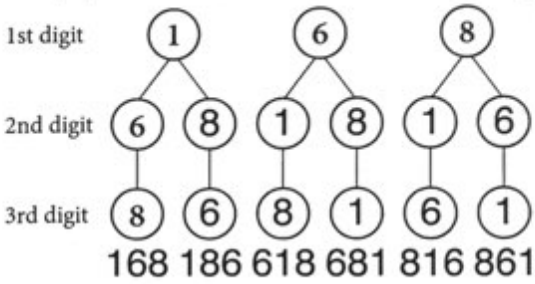
20. [Data Analysis]
Which lake holds closest to one quarter of the total volume of water in the Great Lakes?



Lake Michigan

21. [Probability / Statistics]
How many different three-digit numbers can be made using the digits 1, 6 and 8 once each? [Complete the tree diagram to help you solve the problem.]

6



22. [Problem Solving 1] *
Which deal costs less per ounce?
A) 75¢ for 8 oz
B) $2 for 2 lb

B

23. [Problem Solving 2] *
At the 2008 Olympics a sports commentator said: "USA is one of the 16 countries with the maximum allowed 3 runners. All together there are 103 runners representing 60 countries." How many countries have 2 runners?

11

24. [Problem Solving 3]
Fill in the missing digits.

$$\begin{array}{r} 1\,\boxed{2}\,4 \\ \times \quad\quad 8 \\ \hline \boxed{9}\,9\,\boxed{2} \end{array}$$