

1 2 3 4 5 6 7 8 9

9

1

8

2

7

3

6

4

5

5

4

6

3

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2

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1

9

SSA

JUNIOR SCHOOL

SUMMER

MATH PACKET

RISING

FOURTH GRADE

NAME \_\_\_\_\_

Name \_\_\_\_\_

# Summer Math Packet

## Section A Multiple-Choice Questions

① Look at the number 5,837. What does the digit 5 stand for?

- Ⓐ 5
- Ⓑ 50
- Ⓒ 500
- Ⓓ 5,000

② Which of the following have the same value as nine thousand three hundred seventeen?

Choose the **two** correct answers.

- Ⓐ 9,317
- Ⓑ  $9,000 + 30 + 10 + 7$
- Ⓒ  $9,000 + 30 + 1 + 7$
- Ⓓ  $9,000 + 300 + 10 + 7$
- Ⓔ  $9,000 + 300 + 1 + 7$

③ What are the missing numbers?

$9,850 = 9 \text{ thousands} + \underline{\hspace{2cm}} \text{ hundreds} + \underline{\hspace{2cm}} \text{ tens}$   
 $\quad \quad \quad + 10 \text{ ones}$

- Ⓐ 8 and 5
- Ⓑ 8 and 4
- Ⓒ 7 and 5
- Ⓓ 7 and 4

4 Which list shows counting on by hundreds?

(A) 3,000 4,000 5,000 6,000

(B) 5,200 5,400 5,600 5,800

(C) 7,300 7,400 7,500 7,600

(D) 9,110 9,120 9,130 9,140

5 Which numbers, when rounded to the nearest hundred, are 400?  
Choose the **three** correct answers.

(A) 342

(B) 352

(C) 417

(D) 448

(E) 451

(F) 470

6 Which expression could be used to find the value of  $412 + 569$ ?

(A)  $4 + 5 + 1 + 6 + 2 + 9$

(B)  $40 + 50 + 10 + 60 + 6 + 9$

(C)  $400 + 500 + 1 + 6 + 2 + 9$

(D)  $400 + 500 + 10 + 60 + 2 + 9$

- 7 Malia had a bag of rice with a mass of 1,453 grams. She used 860 grams of rice. How many grams of rice did Malia have left?

- (A) 2,313
- (B) 2,193
- (C) 693
- (D) 593

- 8 What are the missing numbers?

$$86 - 35 = 86 - \underline{\quad\quad\quad} - \underline{\quad\quad\quad}$$

- (A) 40 and 3
- (B) 30 and 5
- (C) 20 and 3
- (D) 20 and 5

- 9 What is the missing digit?

$$\begin{array}{r} 5,946 \\ - 1, \boxed{?}08 \\ \hline 4,438 \end{array}$$

- (A) 1
- (B) 3
- (C) 5
- (D) 7

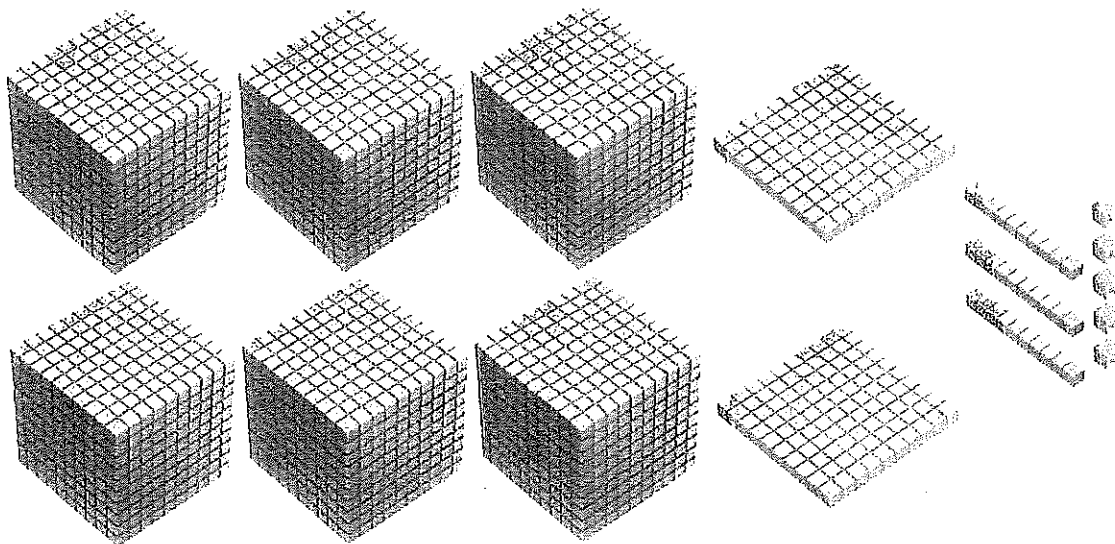
- 10 Which equations are correct? Choose the **three** correct answers.

- (A)  $699 - 345 = 354$
- (B)  $892 - 461 = 435$
- (C)  $1,257 - 1,125 = 135$
- (D)  $1,480 - 1,360 = 120$
- (E)  $2,568 - 1,263 = 1,305$

## Section B Short Answer Questions

(10 × 2 = 20 points)

11 What number is shown by the model?



Write your answer in the answer grid.

⦿	⦿	⦿	⦿	⦿	⦿
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

12 Look for a pattern. What is the missing number?

2,308 2,328 2,348 2,368 \_\_\_\_\_

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 13 The students from a school went on a field trip.  
The number of students when rounded to the nearest hundred is 300.  
What is the greatest possible value of the number? Explain.  
Write your answer and work or explanation in the space below.

- 14 3,786 concert tickets were sold on Saturday.  
965 more tickets were sold on Sunday than on Saturday.  
How many tickets were sold in the two days?

Show your work and write your answer in the space below.

15  $5,789 + 2,346 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

16  $2,000 - 975 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9



- 17 An artist sold an oil painting for \$4,305. He sold a watercolor painting for \$849. How much did he receive in all?

Show your work and write your answer in the space below.

- 18 Student A wrote " $62 + 29 = 62 + 20 + 9$ ," and Student B wrote " $62 + 29 = 62 + 30 - 1$ ."

Are the two students correct? Explain.

Write your answer and your work or explanation in the space below.

- 19 Lauren is finding the difference between 2,057 and 975. She says, "The answer is 2,922 because I found the difference between each pair of digits in the ones, tens, and hundreds place." Identify the incorrect reasoning in Lauren's statement.

Write your explanation in the space below.

- 20 Mason ordered four numbers from greatest to least as shown.

6,741 6,714 647 6,071

Explain Mason's mistake.

Write your explanation in the space below.

## Section C Constructed Response

(21) and (22): 3 points each;  
(23): 4 points)

- (21) Isabel finds a pattern in a set of numbers. Then, she writes the next two numbers in the pattern.

4,025 4,020 4,015 4,010 4,000 3,990

- Explain Isabel's mistake.
- What numbers should Isabel have written in the blanks?
- Explain how you arrived at your answers.

Write your answers and your work or explanation in the space below.

22 Movie tickets are sold at two booths, A and B. Booth A had 295 more tickets than Booth B at first. 58 were tickets were moved from Booth A to Booth B.

- Explain which booth had more tickets in the end.
- Find how many more tickets one booth had than the other.

Write your answers and your work or explanation in the space below.

- 23 Alan has \$20. He wants to buy some stationery from a store.

### Cost of Stationery

Item	Cost
Diary	\$11.59
File	\$5.88
Stapler	\$3.10
Paintbrush	\$3.00
Scissors	\$2.25

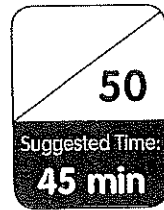
- Alan buys a few different items. He wants only one of each item. Which items should he buy so that he has the least change left?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.



# Assessment Guide

## Cumulative Review 2



### Section A Multiple-Choice Questions

(10 × 2 = 20 points)

- 1 Which multiplication fact can be used to find  $24 \div 3$ ?
- (A)  $2 \times 12 = 24$
  - (B)  $3 \times 8 = 24$
  - (C)  $4 \times 6 = 24$
  - (D)  $12 \times 2 = 24$
- 2 Mason multiplied a list of numbers by 6. Which statement describes the products?
- (A) All the products are odd.
  - (B) All the products are even.
  - (C) All the products have the digit 6 in the ones place.
  - (D) Some of the products are odd and some of the products are even.
- 3 Which expressions are equal to 360?  
Choose the **three** correct answers.
- (A)  $3 \times 12$
  - (B)  $3 \times 60$
  - (C)  $8 \times 45$
  - (D)  $9 \times 40$
  - (E)  $30 \times 6$
  - (F)  $120 \times 3$

- 4 A multiplication fact is shown below.

$$8 \times 9 = 72$$

Which division problems can be solved using this multiplication fact?  
Choose the **two** correct answers.

(A)  $9 \div 8 = ?$

(B)  $8 \div 9 = ?$

(C)  $9 \div 72 = ?$

(D)  $72 \div 9 = ?$

(E)  $8 \div 72 = ?$

(F)  $72 \div 8 = ?$

- 5 Which problem can be solved by finding  $36 \div 9$ ?

(A) Ana had 9 bags of marbles. There were 36 marbles in each bag. Find the total number of marbles.

(B) Ana put 36 marbles into bags. She put 9 marbles in each bag. Find the total number of bags.

(C) Ana had 36 marbles. She gave 9 marbles to her brother. Find the number of marbles she had left.

(D) Ana had 9 marbles. She found 36 more marbles. Find the number of marbles in all.

- 6 Which equation is correct?

(A)  $7 + 7 + 7 + 7 = 21$

(B)  $8 \times 5 = 45$

(C)  $54 \div 9 = 6$

(D)  $72 \div 12 = 7$

- 7 What is the missing digit in each box?

$$\begin{array}{r} 32\boxed{?} \\ \times \quad 7 \\ \hline 2,27\boxed{?} \end{array}$$

- (A) 1  
(B) 3  
(C) 5  
(D) 7
- 8 There are 7 bowls.  
Each bowl has 8 cherries.  
How many cherries are there in all?
- (A) 56  
(B) 54  
(C) 15  
(D) 13
- 9 Jason packed 42 buttons equally into 7 packets.  
How many buttons did he pack into each packet?
- (A) 6  
(B) 7  
(C) 8  
(D) 9



10 Zoey has 7 necklaces.  
She has 3 times as many bracelets as necklaces.  
How many bracelets and necklaces does Zoey have in all?

- (A) 28
- (B) 18
- (C) 10
- (D) 4

## Section B Short Answer Questions

11 to 18 Part A, 18 Part B;  
18 Part C: 2 points each)

11  $84 \div 12 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 12 Lucas says, " $11 \div 11 = 0$  because dividing a number by itself gives nothing." Is Lucas correct? Explain.

Write your answer and your work or explanation in the space below.

13  $345 \times 5 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

14 Mr. Lee arranges 4 rows of chairs in a room. There are 15 chairs in each row. How many chairs are there in all?

Show your work and write your answer in the space below.

- 15 Carla has 18 beads. Paige has 6 times as many beads as Carla. How many beads do they have in all?

Show your work and write your answer in the space below.

- 16 Store A sold 86 boxes of strawberries. Store B sold 9 more boxes of strawberries than Store A. There were 6 strawberries in each box. How many strawberries did Store B sell?

Show your work and write your answer in the space below.

- 17 Ella is making 9 treat bags for her birthday party. She cuts 81 centimeters of ribbon into equally sized pieces to tie her treat bags. After she finishes, she realizes that she needs to make 3 more treat bags.  
How many more centimeters of ribbon does Ella need?

Show your work and write your answer in the space below.

- 18 This question has three parts.

**Part A**

Liam wants to buy 7 boxes of colored pencils. There are 24 colored pencils in each box. He says, "There are 148 colored pencils in all."  
Is he correct? Explain.

Write your answer and your work or explanation in the space below.

**Part B**

Each box of colored pencils costs \$7. Liam has \$50. Does he have enough money to pay for the 7 boxes of colored pencils? Explain.

Write your answer and your work or explanation in the space below.

**Part C**

Liam buys a box of 40 erasers.

The erasers are shared equally among 6 children.

What is the greatest number of erasers each child can get? Explain.

Write your answer and your work or explanation in the space below.

## Section C Constructed Response

(19) and (20): 3 points each;  
(21): 4 points)

19 Ryan divides 63 by 9. He says that the quotient is 54 because addition is the opposite of division and  $9 + 54 = 63$ .

- Explain Ryan's mistake.
- What is the correct answer?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

21 There are 30 chicks and horses in a farm.  
Each chick has 2 legs.  
Each horse has 4 legs.  
The chicks and horses have 100 legs in all.

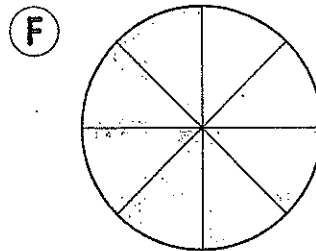
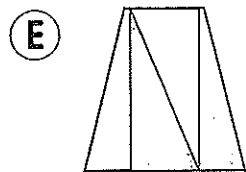
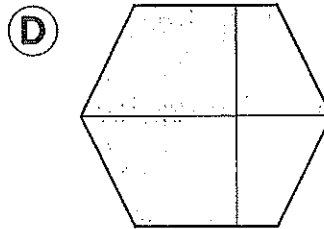
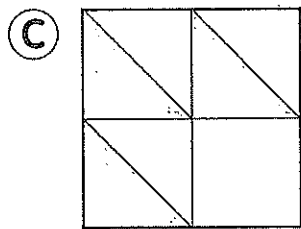
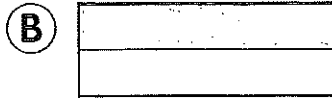
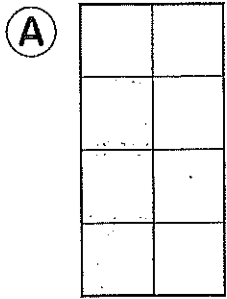
- How many chicks are there?
- How many horses are there?

Write your answers and your work or explanations in the space below.

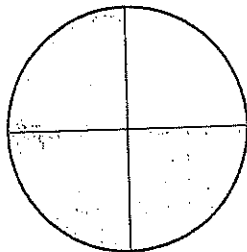


3 Which figure shows that  $\frac{3}{4}$  of it is shaded?

Choose the **two** correct answers.



6 Which fraction is equivalent to  $\frac{3}{4}$ ?



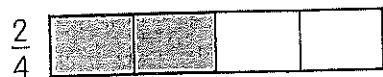
(A)  $\frac{3}{8}$

(B)  $\frac{4}{8}$

(C)  $\frac{6}{8}$

(D)  $\frac{1}{4}$

- 10 Compare the fractions. Which of the following describes the fractions?  
Choose the **two** correct answers.



(A)  $\frac{2}{3} > \frac{2}{4}$

(B)  $\frac{2}{3} < \frac{2}{4}$

(C)  $\frac{2}{4}$  is greater than  $\frac{2}{3}$ .

(D)  $\frac{2}{3}$  is greater than  $\frac{2}{4}$ .

(E)  $\frac{2}{4}$  is equal to  $\frac{2}{3}$ .

## Section B Short Answer Questions

(11 to 19) Part A,  
19 Part B: 2 points each

- 11 Write the fraction that represents the shaded part of the set.  
Write each answer in the blank.



A



B



C

Set A: \_\_\_\_\_

Set B: \_\_\_\_\_

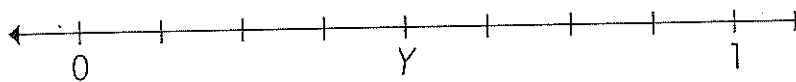
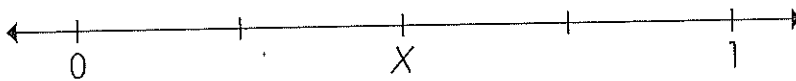
Set C: \_\_\_\_\_

13 What is  $\frac{2}{6}$  of 18?

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

14 Look at the number lines.



- What are the values of the numbers X and Y as fractions?  
Explain.
- Are the two fractions equivalent?

Write your answers and your work or explanation in the space below.

- 17 Diego pours  $\frac{3}{8}$  liter of apple juice,  $\frac{1}{8}$  liter of carrot juice, and  $\frac{5}{8}$  liter of beetroot juice into containers. Shade the models to show each fraction. Which fraction is the greatest? Explain.

Show your work and write your answer in the space below.

apple juice								
carrot juice								
beetroot juice								

- 18 Claire wrote " $\frac{1}{4} > \frac{1}{3}$ " and explained that it is because 4 is greater than 3. Is she correct? Explain.

Write your answer and your work or explanation in the space below.

## Section C Constructed Response

(20) and (21): 3 points and  
(22): 4 points

- (20) Aiden placed Point M on the number line.

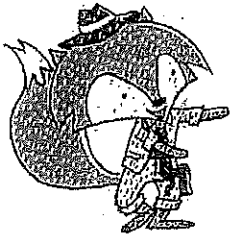


Aiden said that M represents  $\frac{5}{6}$ .

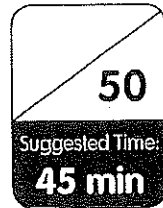
- Explain Aiden's mistake.
- What should the correct answer be?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

Name: \_\_\_\_\_ Date: \_\_\_\_\_



# Assessment Guide Cumulative Review 4

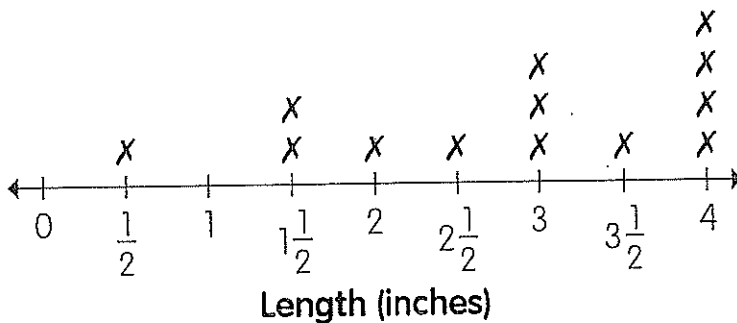


## Section A Multiple-Choice Questions

(10 × 2 = 20 points)

- 1 How many minutes are there in 3 hours?
- (A) 300
  - (B) 120
  - (C) 180
  - (D) 80

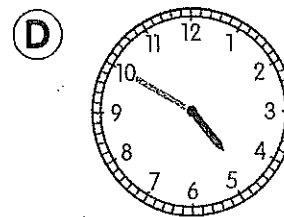
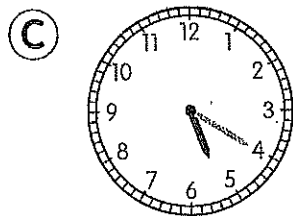
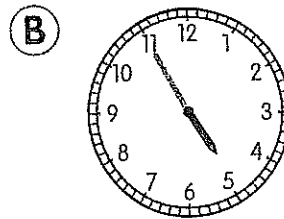
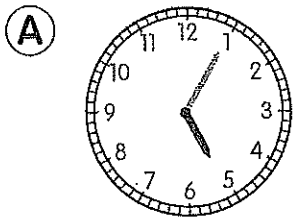
- 4 Peter measured the lengths of some line segments to the nearest half inch. Then, he made a line plot of the data.



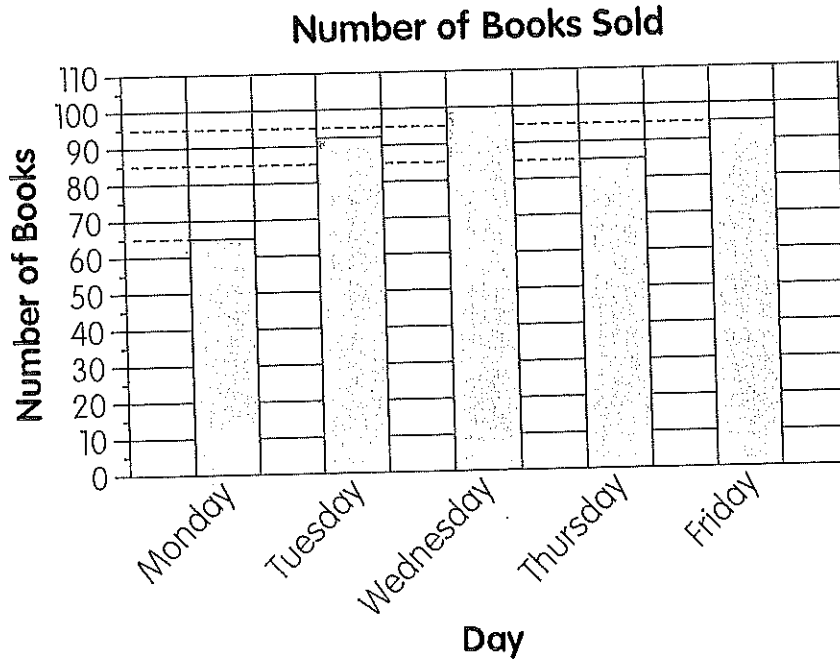
How many line segments have a length of  $3\frac{1}{2}$  inches or more?

- (A) 1
- (B) 3
- (C) 4
- (D) 5

- 5 Lilian starts swimming at 4:15 P.M. She finishes swimming 40 minutes later. Which clock shows the time that Lilian finishes swimming?



- 9 The bar graph shows the number of books sold each day at a book fair.

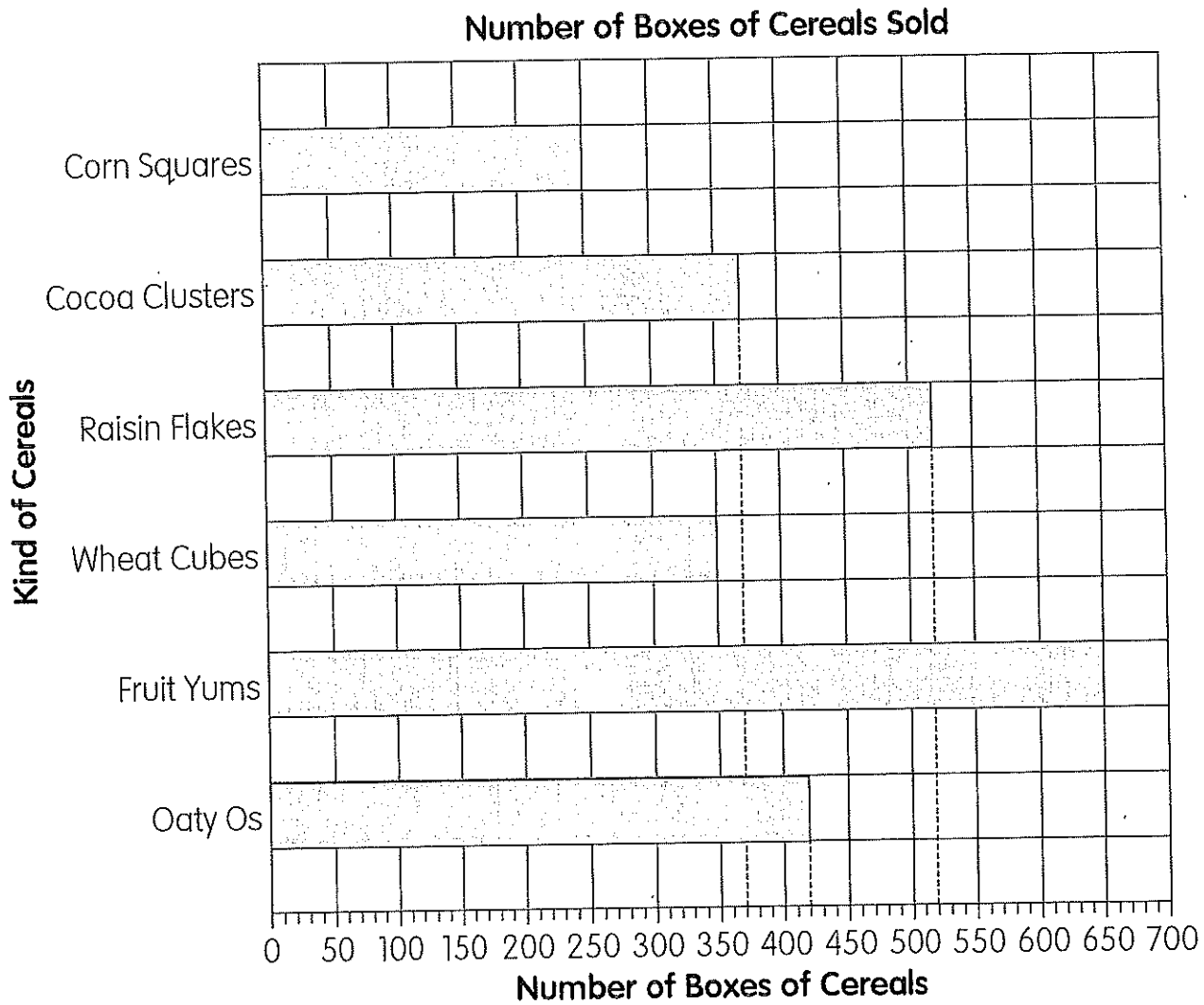


On which days were the number of books sold fewer than 90?  
Choose the **two** correct answers.

- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday
- (E) Friday



10. The bar graph shows the number of boxes of cereal Mr. Davis sold at his store last year.



Which two kinds of cereals did Mr. Davis sell 890 boxes altogether?

- (A) Corn Squares and Fruit Yums
- (B) Oaty Os and Cocoa Clusters
- (C) Cocoa Clusters and Raisin Flakes
- (D) Raisin Flakes and Wheat Cubes

## Section B Short Answer Questions

(10 × 2 = 20 points)

- 11 Bryan wrote "138 min = 1 h 38 min."  
Explain Bryan's mistake.

Write your explanation in the space below.

- 15 Natalie watches a performance for 2 hours 10 minutes.  
How many minutes is equal to 2 hours 10 minutes?

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

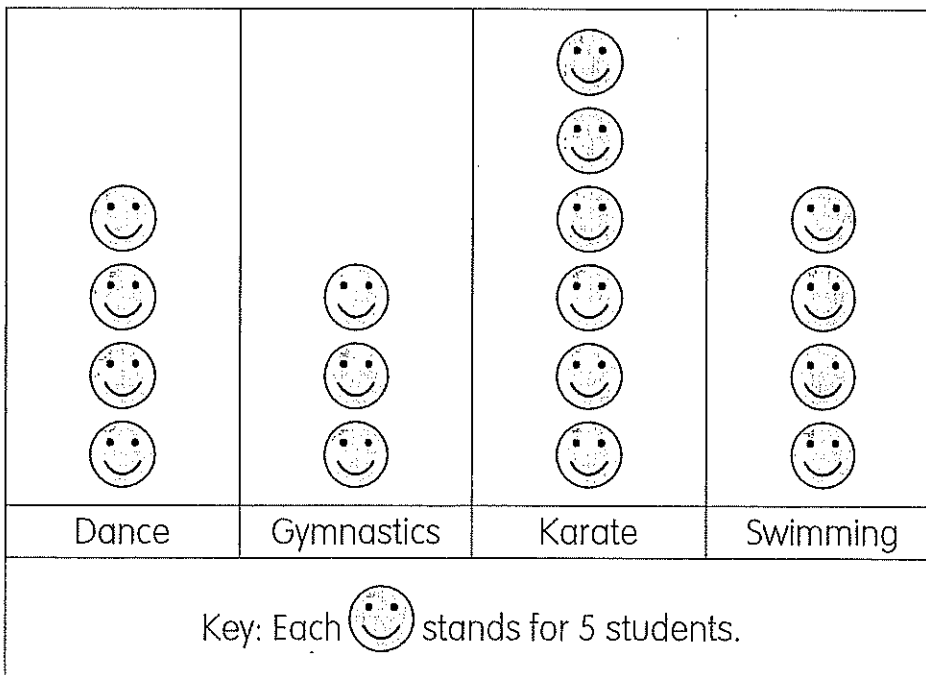
- 17 Eli left his home at 1:50 P.M. He returned home at 7:40 P.M.

How long was Eli away from his home?  
Give your answer in hours and minutes.

Show your work and write your answer in the space below.

- 18 The picture graph shows the favorite after-school activities of the third graders at Buchanan Elementary School.

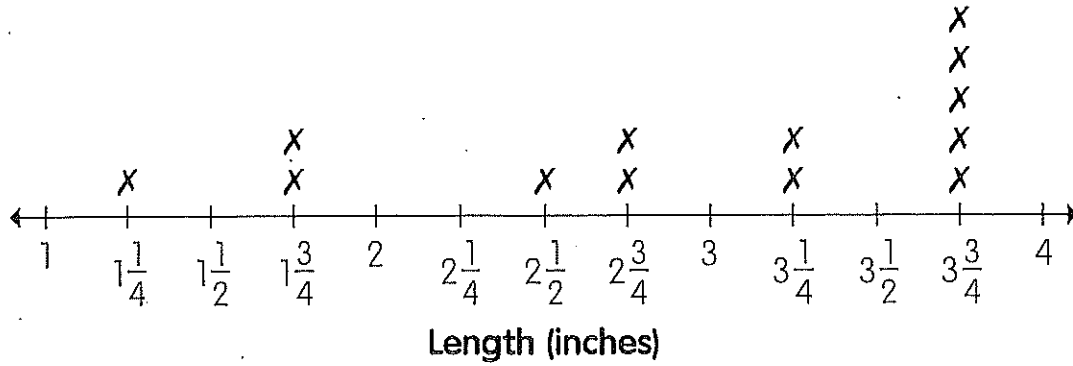
**Favorite After-School Activities**



Write the answer in the blank.

\_\_\_\_\_ more students chose karate than gymnastics as their favorite after-school activity.

- 20 Grace measured the lengths of some ropes to the nearest half inch or quarter inch. Then, she made a line plot of the data.



Grace said that 3 ropes are shorter than  $2\frac{3}{4}$  inches because she found  $\times$  above the 3 markings: the  $1\frac{1}{4}$ -inch mark, the  $1\frac{3}{4}$ -inch mark, and the  $2\frac{1}{2}$ -inch mark.

Identify the incorrect reasoning in her statement.

Write your explanation in the space below.

- 22 Bus Service A leaves a station every 12 minutes. The first bus leaves the station at 8:00 A.M. Ariana wants to take Bus Service A. She reaches the station at 8:45 A.M. What is the earliest time she can board the bus?

Show your work and write your answer in the space below.

- 23 The lengths of six line segments are measured to the nearest half or quarter inch.

Line segment	A	B	C	D	E	F
Length (inches)	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{4}$

Draw the line segments in the space below.

Show your data on the line plot.

