

Rising 6th grade level
(current 5th)

Pre-Module Assessment

Name

Date

1. Ray earned \$96 on Tuesday, which is 4 times the amount he earned on Monday.

How much money did Ray earn on Monday?

Ray earned \$ _____ on Monday.

2. Kelly uses 8 cups of flour to make 3 cakes. She uses an equal amount of flour for each cake. How many cups of flour does Kelly use for each cake?

Write one phrase from the given answer choices in each blank.

Kelly uses _____ for each cake because _____ are shared equally among _____.

Answer Choices

$\frac{3}{8}$ cups of flour	$\frac{8}{3}$ cups of flour	3 cakes	8 cups of flour	8 cakes
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3. Consider pattern A and pattern B in the table.

Pattern A	Pattern B
2	8
6	24
10	40
14	56

Which statements describe the relationships in the table? Choose **all** that apply.

- A. Each number in pattern B is 6 more than the corresponding number in pattern A.
- B. The rule for pattern A is add 4.
- C. Each number in pattern B is 4 times as much as the corresponding number in pattern A.
- D. The rule for pattern B is subtract 32.
- E. Each number in pattern A is $\frac{1}{4}$ times as much as the corresponding number in pattern B.
- F. The rule for pattern B is add 16.

4. Use the rules to complete parts A–C.

The rule for pattern M is add 3.

The rule for pattern N is add 4.

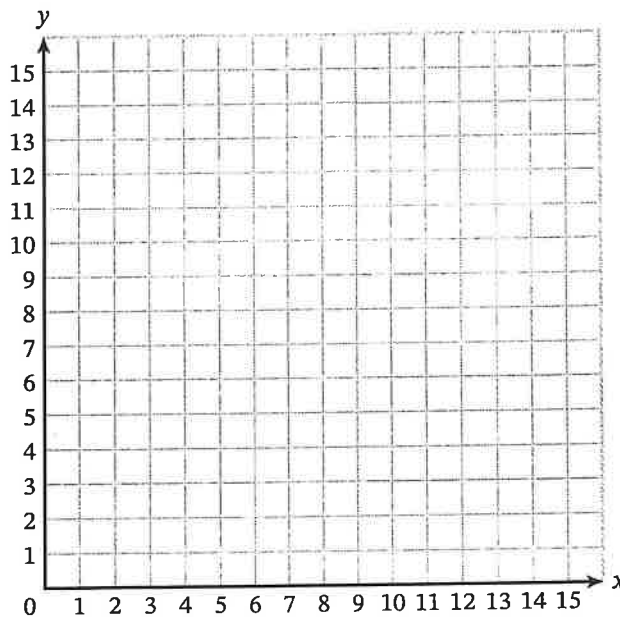
Part A

Complete the table by using the given rules.

Pattern M, x	Pattern N, y	Ordered Pair, (x, y)
0	0	(0, 0)

Part B

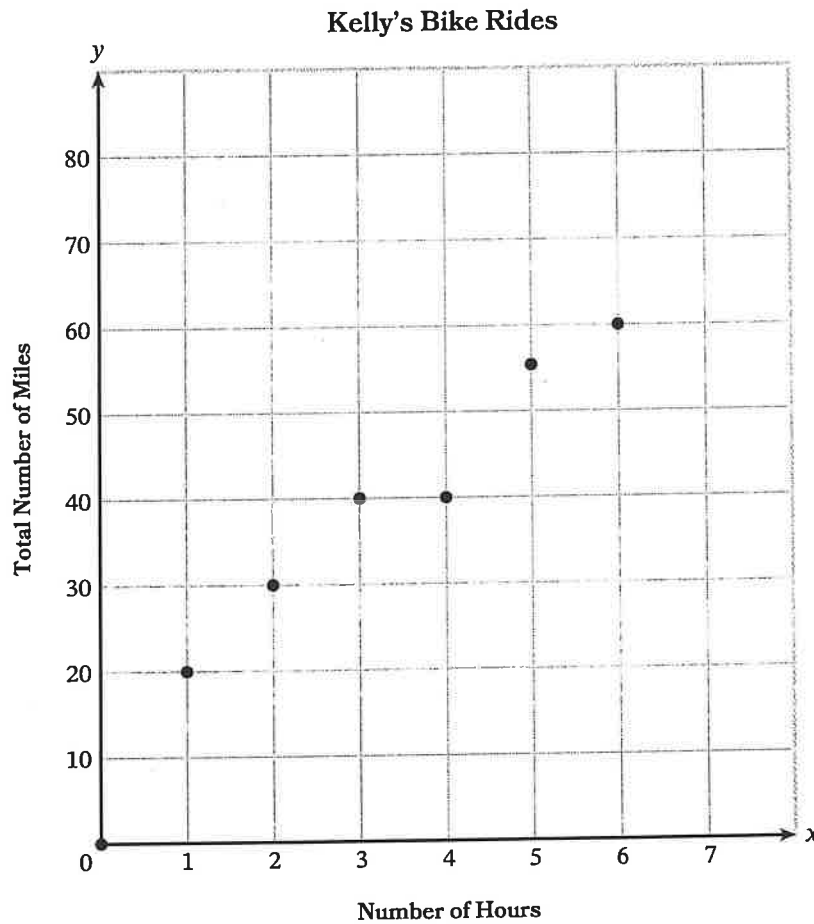
Use the ordered pairs from the table to plot four points in the coordinate plane.



Part C

What is the number in pattern M when the number in pattern N is 36?

5. The graph shows the total number of miles Kelly rode after a given number of hours.



Which statements describe points in the graph? Choose **all** that apply.

- A. Kelly rides a total of 30 miles after 2 hours.
- B. Kelly rides a total of 6 miles after 60 hours.
- C. Kelly rides a total of 20 miles after 1 hour.
- D. Kelly rides a total of 40 miles after 4 hours.
- E. Kelly rides a total of 3 miles after 40 hours.

6. Evaluate.

$$13 \times \frac{7}{5} = \underline{\hspace{2cm}}$$

7. Divide.

$$367 \div 26$$

Quotient:

Remainder (write 0 if none):

8. Evaluate.

$$26.7 \times 7.1 = \underline{\hspace{2cm}}$$

9. Evaluate.

$$28.8 \div 3.6 = \underline{\hspace{2cm}}$$

Pre-Module Assessment

Name _____

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1. Circle **all** the factors of 28.

1	2	3	4
5	6	7	8
12	13	14	28
56	84	112	140

2. Which numbers are multiples of 6? Choose **all** correct numbers.

- A. 1
- B. 2
- C. 3
- D. 6
- E. 18
- F. 36

3. What is the value of $\frac{4}{5} \times \frac{2}{3}$?

A. $\frac{6}{8}$

B. $\frac{8}{15}$

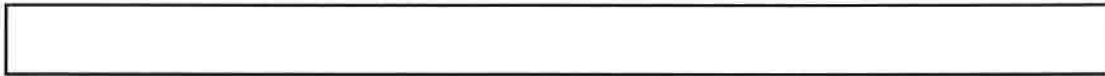
C. $\frac{12}{10}$

D. $\frac{22}{15}$

4. Consider $\frac{1}{3} \div 4$.

Part A

Partition and label a tape diagram that represents $\frac{1}{3} \div 4$.



Part B

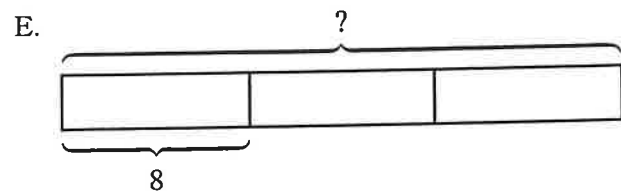
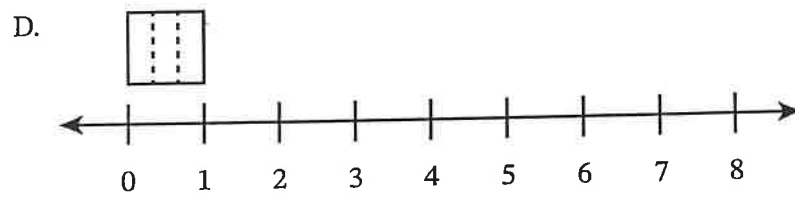
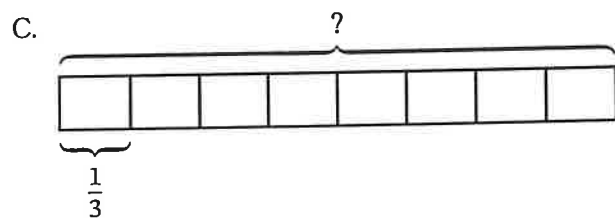
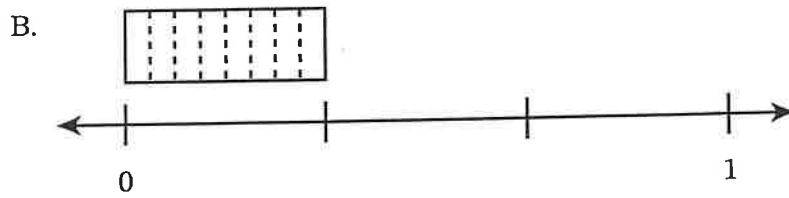
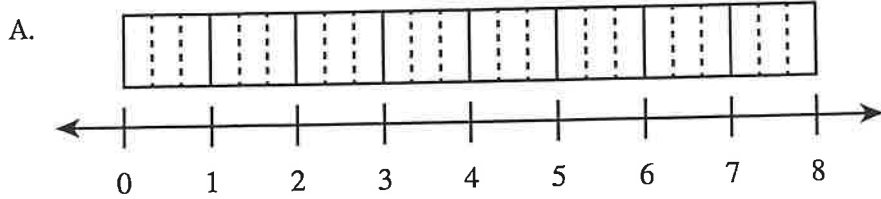
Evaluate.

$\frac{1}{3} \div 4 =$ _____

5. Consider $8 \div \frac{1}{3}$.

Part A

Which model can be used to find the quotient $8 \div \frac{1}{3}$? Choose **all** that apply.



Part B

Evaluate.

$8 \div \frac{1}{3} = \underline{\hspace{2cm}}$

6. Riley has 87 cups of dog food. Riley pours the dog food equally into 4 containers. How many cups of dog food are in each container?

There are _____ cups of dog food in each container.

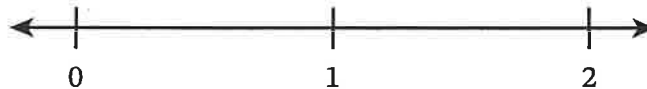
7. What is the value of $8.98 + 7.3$?

- A. 1.68
- B. 15.28
- C. 16.28
- D. 97.1

8. Evaluate.

$$6.2 - 1.43 = \underline{\hspace{2cm}}$$

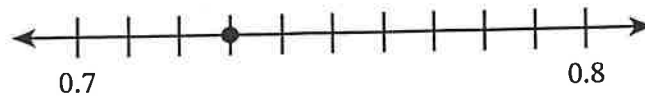
9. Partition each whole number interval into fourths. Then label $\frac{1}{4}$ and $\frac{7}{4}$.



10. Compare the two fractions by using $>$, $=$, or $<$.

$$\frac{5}{6} \underline{\hspace{1cm}} \frac{3}{4}$$

11. Consider the point on the number line.



Part A

What number is represented by the point on the number line?

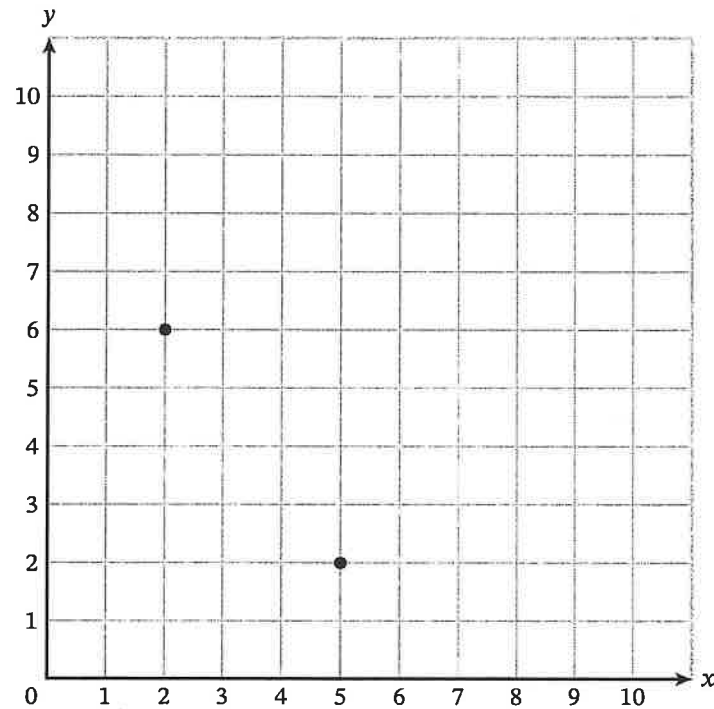
Part B

Plot 0.78 on the number line.

12. Order the values from least to greatest. Write one number from the given answer choices in each box.

Least					Greatest
Answer Choices					
2.18	2.09	2.5	2.8	2.745	

13. Consider the two points plotted in the coordinate plane.



Part A

Consider a rectangle with the two points plotted as two of the four vertices of the rectangle. Plot the other two vertices. Then draw the rectangle in the coordinate plane.

Part B

What is the area of the rectangle?

The area of the rectangle is _____ square units.

Pre-Module Assessment

Name _____

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1. A teacher has 243 pencils. She gives away 67 of them. She places the remaining pencils in equal groups in baskets. Each basket holds 8 pencils. How many baskets does the teacher need for the remaining pencils?

Part A

Which is the closest estimate for the number of baskets the teacher needs for the remaining pencils?

- A. 160
- B. 40
- C. 30
- D. 20

Part B

Which equation could be used to solve the problem? Let b represent the number of baskets.

- A. $b = 243 - (67 \div 8)$
- B. $b = 243 - 67 - 8$
- C. $b = (243 - 67) \div 8$
- D. $b = (243 - 8) \div 67$

Part C

How many baskets does the teacher need for the remaining pencils?

The teacher needs _____ baskets.

2. Evaluate.

$$(4 - 1.8) \times (0.2 + 1.5) = \underline{\hspace{2cm}}$$

3. Which expression represents 3 times the sum of 20 and 1.5?

- A. $3 + (20 \times 1.5)$
- B. $3 \times (20 + 1.5)$
- C. $3 \times (20 - 1.5)$
- D. $3 \times (20 \times 1.5)$

4. Which verbal description represents $(2 \times 0.4) - 0.37$?

- A. 0.37 more than the product of 2 and 0.4
- B. 0.37 subtracted by the product of 2 and 0.4
- C. 0.37 less than the quotient of 2 and 0.4
- D. 0.37 less than the product of 2 and 0.4

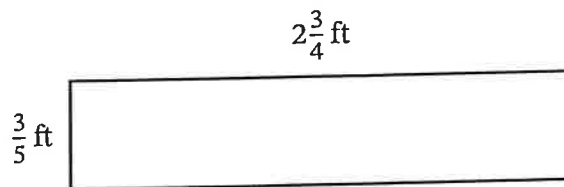
5. Determine which expression can be used to solve each problem. Write one expression from the given answer choices in each box.

Problem	Expression
Lisa has 3.75 gallons of paint. She uses 1.5 gallons for an art project. She uses the rest of the paint to paint two same-size boxes. How many gallons of paint does Lisa use to paint each box?	
One day, Kelly uses 1.5 cups of water to make bread. Ray uses 3.75 cups of water to make bread. The next day, Kelly and Ray each use the same amount of water they used the day before to make bread. How many total cups of water do Kelly and Ray use in the two days?	

Answer Choices

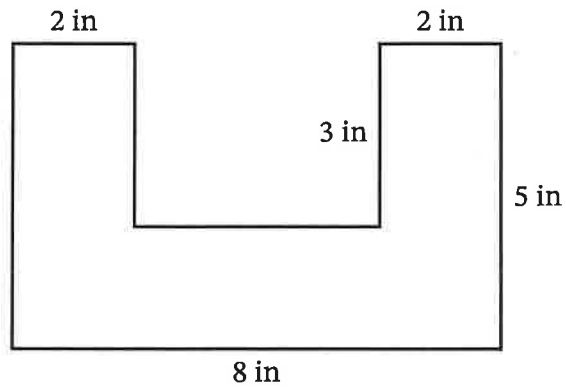
$(3.75 + 1.5) \div 2$	$(3.75 - 1.5) \div 2$	$2 \times (3.75 - 1.5)$	$2 \times (3.75 + 1.5)$
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6. Find the area of the rectangle.



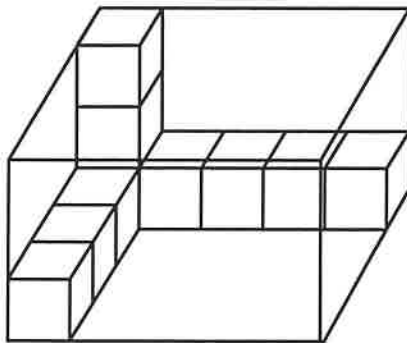
The area of the rectangle is _____ square feet.

7. Find the area of the figure.



The area of the figure is _____ square inches.

8. What is the volume of the right rectangular prism in cubic units?

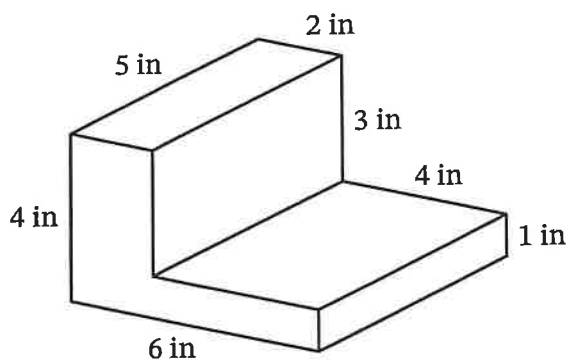


Each cube represents 1 cubic unit.

- A. 9 cubic units
- B. 10 cubic units
- C. 24 cubic units
- D. 60 cubic units

9. A right rectangular prism has a volume of 96 cubic meters. The width of the prism is 6 meters. The length of the prism is 8 meters. What is the height of the prism?
- A. 48 meters
 - B. 16 meters
 - C. 12 meters
 - D. 2 meters

10. The figure is composed of right rectangular prisms. What is the volume of the figure?



The volume of the figure is _____ cubic inches.

Pre-Module Assessment

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1. Add. Choose the correct sum.

$$\begin{array}{r} 465 \\ 279 \\ + 357 \\ \hline \end{array}$$

- A. 981
- B. 991
- C. 1,081
- D. 1,101

2. Divide. Choose the correct quotient.

$$652 \div 80$$

- A. 8.12
- B. 8.15
- C. 8.52
- D. 8.65

3. Write the equivalent decimal and percent from the given answer choices in each box.

Fraction	Decimal	Percent
$\frac{2}{5}$		
$\frac{1}{4}$		

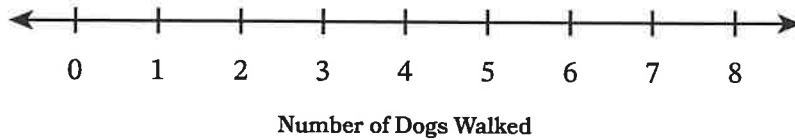
Answer Choices									
0.14	0.2	0.25	0.4	2%	4%	14%	20%	25%	40%

4. Kayla has a dog walking business. The numbers of dogs that Kayla walks each day for 14 days is shown.

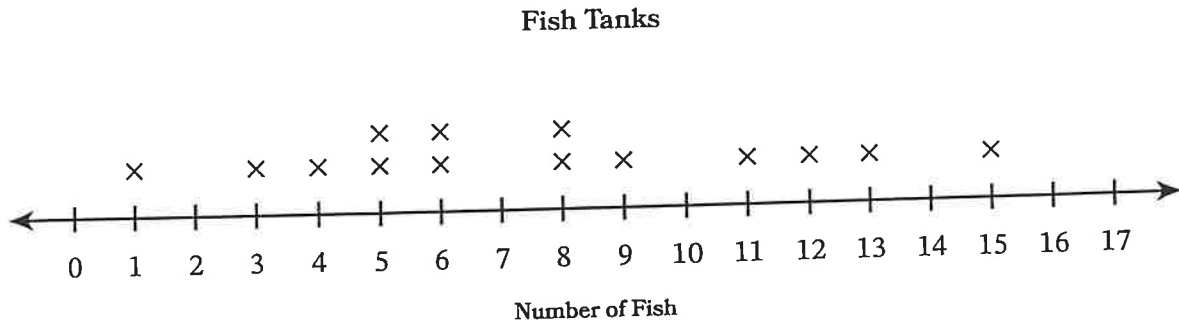
4 6 3 4 7 2 8 7 5 4 3 4 2 5

Create a line plot for the number of dogs walked each day.

Days Walking Dogs



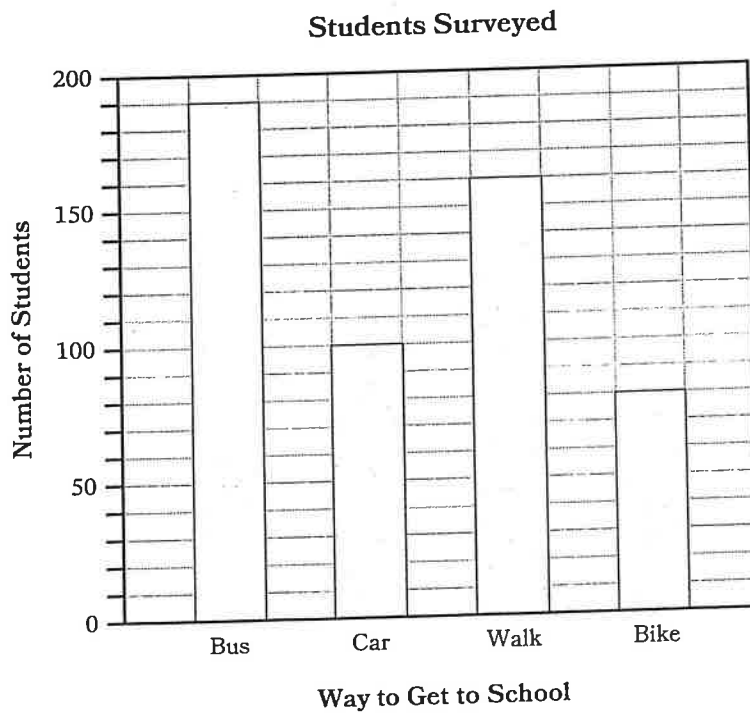
5. The line plot shows the numbers of fish in each of Adesh's 14 fish tanks.



Adesh cleans the 3 fish tanks with the fewest fish. He puts the fish from these 3 tanks into a holding tank. How many fish are in the holding tank?

_____ fish

6. The results of a survey of 530 students are shown in the bar graph.



How many fewer students get to school by bus than by walking and biking combined?

_____ students

Rounding Numbers

Round each to the place indicated.

1) $\underline{8}$,632,051

2) 25, $\underline{9}$ 52,938

3) 803, $\underline{1}$ 19

4) $\underline{7}$ 3,693

5) $\underline{2}$,461,612,242

6) $\underline{7}$ 89,132,377

7) 9,885,659,260; billions

8) 2,628,259; thousands

9) 347,168; ten thousands

10) 9,727,322,054; billions

11) 1,399,179; thousands

12) 271,156,694; millions

13) 44.5443 $\underline{4}$ 95

14) 5.3373 $\underline{9}$ 59

15) 8.7495 $\underline{9}$ 80

16) 74. $\underline{9}$ 1

17) 0.720 $\underline{9}$ 1

18) 23.03 $\underline{6}$ 8

19) 9.3113; thousandths

20) 6.9788; tenths

21) 6.3761; tenths

22) 1.7354948; hundred-thousandths

23) 1.495485; thousandths

24) 8.121; hundredths

Order of Operations

Evaluate each expression.

1) $3(6 + 7)$

2) $5 \times 3 \times 2$

3) $72 \div 9 + 7$

4) $2 + 7 \times 5$

5) $9 + 8 - 7$

6) $9 - 32 \div 4$

7) $5(10 - 1)$

8) $48 \div (4 + 4)$

9) $20 \div (4 - (10 - 8))$

10) $40 \div 4 - (5 - 3)$

11) $9 + 9 + 6 - 5$

12) $(5 + 16) \div 7 - 2$

13) $7 + 10 \times 5 + 10$

14) $(6 + 25 - 7) \div 6$

Fractions and Decimals

Write each as a decimal. Use repeating decimals when necessary.

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

2) $2\frac{3}{5}$

3) $\frac{5}{8}$

4) $\frac{3}{5}$

5) $\frac{7}{200}$

6) $\frac{8}{33}$

7) $\frac{6}{11}$

8) $\frac{7}{50}$

9) $4\frac{27}{125}$

10) $\frac{7}{20}$

Fractions, Decimals, and Percents

Write each as a decimal. Round to the thousandths place.

1) 90%

2) 30%

3) 115.9%

4) 9%

5) 7%

6) 65%

7) 0.3%

8) 445%

Write each as a percent. Round to the nearest tenth of a percent.

9) 0.452

10) 0.006

11) 0.002

12) 0.05

13) 4.78

14) 0.1

15) 3.63

16) 0.03

Write each as a fraction.

17) 25%

18) 70%

19) 93%

20) 58%

21) 50%

22) $66.\overline{6}\%$

23) 20%

24) 80%

25) 71%

26) 30%

Write each as a percent. Use repeating decimals when necessary.

27) $\frac{1}{2}$

28) $\frac{1}{8}$

29) $\frac{2}{3}$

30) $\frac{1}{100}$

31) $2\frac{1}{10}$

32) $\frac{3}{8}$

33) $\frac{1}{10}$

34) $\frac{87}{100}$