7-1 **Homework**

Name _____ Date _____

1. Consider the expression $2\frac{1}{2} - (\frac{3}{4} + \frac{5}{8})$.

a. Which operation is done first, subtraction or addition?

_____

b. Write the computation in words.

_____

2. Consider the expression $4.5 + 6 \times 0.1$.

a. Which operation is done first, addition or multiplication?

_____

b. Write the computation in words.

_____

Write the computation in words.

3. $7 \div \frac{1}{7}$ _____

4. $8 - t$ _____

5. $3.6 \div 0.4 - 0.5$ _____

6. $5 \cdot (6 + 7)$ _____

Write an expression for the words.

7. Add $\frac{1}{6}$ and $\frac{4}{9}$. _____

8. Subtract the product of 5 and 11 from 100. _____

9. Divide 9 by 2 and then add 5.7. _____

10. Multiply 42 by the sum of 4 and r. _____

7-1 Name _____ Date _____

Remembering

Complete each division. Check your answer.

1. $3\overline{)1{,}957}$

2. $9\overline{)3{,}103}$

3. $7\overline{)5{,}768}$

Divide.

4. $69\overline{)4{,}899}$

5. $87\overline{)2{,}001}$

6. $52\overline{)3{,}432}$

7. $25\overline{)1{,}175}$

8. $38\overline{)2{,}660}$

9. $46\overline{)2{,}438}$

Write an equation to solve the problem. Draw a model if you need to.

10. Jesse drives $6\frac{3}{8}$ miles in a golf cart during a round of golf. Payton drives $7\frac{3}{4}$ miles. How much farther does Payton drive?

_____

11. Stretch Your Thinking Write the computation in words for an expression that uses all four operations (addition, subtraction, multiplication, and division). Then, write an expression for the words.

_____

_____

_____

7-2 **Homework**

Name _____ Date _____

1. Follow the Order of Operations to simplify $27 \div (3 \cdot 3) + 17$

Step 1 Perform operations inside parentheses. _____

Step 2 Multiply and divide from left to right. _____

Step 3 Add and subtract from left to right. _____

Simplify. Follow the Order of Operations.

2. $54 - 200 \div 4$

3. $0.8 \div (0.07 - 0.06)$

4. $3 \cdot 8 - 6 \div 2$

5. $(\frac{3}{8} + \frac{1}{4}) \cdot 16$

6. $64 + 46 - 21 + 29$

7. $72 \div (7 - 1) \cdot 3$

8. $0.8 - 0.5 \div 5 + 0.2$

9. $\frac{5}{6} - 4 \cdot \frac{1}{12}$

10. $5 \cdot 15 \div 3$

11. $32 \div (2.3 + 1.7) \cdot 3$

12. $(1\frac{1}{2} - \frac{3}{4}) \times \frac{1}{4}$

13. $(6.3 - 5.1) \cdot (0.7 + 0.3)$

14. $12 \div 0.1 + 12 \div 0.01$

15. $\frac{1}{2} \cdot \frac{1}{2} \div \frac{1}{2}$

16. $10 - 4 + 2 - 1$

7-2 Name _____ Date _____

Remembering

Solve.

1. $5\overline{)44.3}$ **2.** $2\overline{)125.65}$ **3.** $5\overline{)34.565}$

Write an equation to solve the problem. Draw a model if you need to.

4. The students of Turner Middle School are going on a field trip. There are 540 students attending. A bus can hold 45 students. How many buses are needed for the field trip?

_____

5. The area of a rectangular court is 433.37 square meters, and the length of the court is 28.7 meters. What is width of the court?

_____

Write the computation in words.

6. $5 \div \frac{1}{8}$ _____

7. $2.4 \div 0.6 + 0.2$ _____

8. Stretch Your Thinking Write step-by-step instructions for simplifying the following expression.

$10 \cdot [60 \div (11 + 4)] - 3$

_____

_____

_____

_____

7-3 **Homework**

Name _____ Date _____

Evaluate the expression.

1. $m \div 0.3$ for $m = 1.8$

2. $3\frac{1}{3} - x$ for $x = \frac{5}{6}$

3. $50 - n \div 2$ for $n = 30$

4. $x \cdot 1\frac{1}{2}$ for $x = 10$

5. $10 \cdot (20 + d)$ for $d = 30$

6. $120 \div (x \cdot 6)$ for $x = 2$

7. $a \cdot \frac{1}{3} + 3 \div \frac{1}{3}$ for $a = 3$

8. $(0.15 - t) \cdot 100$ for $t = 0.02$

9. $h \div 0.07$ for $h = 4.9$

10. Max bought a pair of jeans for $32 and three T-shirts for t dollars each.

a. Write an expression for the total amount Max spent.

_____

b. If each T-shirt cost $9, how much did Max spend?

_____

11. Luke is 4 years younger then Zoe. Mischa is half Luke's age. Let z be Zoe's age.

a. Write an expression for Luke's age.

_____

b. Write an expression for Mischa's age.

_____

c. If Zoe is 16 years old, how old are Luke and Mischa?

_____

7-3 Name _____ Date _____

Remembering

Solve.

1. $0.8\overline{)64}$

2. $0.008\overline{)72}$

3. $0.04\overline{)16}$

4. $0.5\overline{)80}$

5. $0.48\overline{)1{,}536}$

6. $0.76\overline{)1{,}596}$

Write a word problem for the equation. Draw a model to show the product.

7. $\frac{1}{2} \cdot \frac{4}{5} = x$

_____

_____

_____

_____

_____

Simplify. Follow the Order of Operations.

8. $\frac{3}{5} - 2 \cdot \frac{1}{10}$

9. $40 \div (6 - 1) \cdot 3$

10. $\left(\frac{1}{2} + \frac{3}{8}\right) \cdot 24$

11. $0.4 \div (0.09 - 0.07)$

12. $66 - 150 \div 10$

13. $6 \cdot 5 - 9 \div 3$

14. Stretch Your Thinking Write a two-operation expression that equals 31 when evaluated for $x = 5$.

_____

Name _____ Date _____

1. a. Write the first five terms of a numerical pattern that begins with 2 and then adds 3.

_____

b. Write an expression for the sixth term of the pattern.

_____

c. Write the sixth term.

_____

2. a. Write the first five terms of a pattern that begins with 5, and then adds 5. ___ ___ ___ ___ ___

b. Write the first five terms of a pattern that begins with 20, and then adds 20. ___ ___ ___ ___ ___

c. Circle the corresponding pairs of terms in the patterns. How does the top term compare to the bottom term?

_____

d. How does the bottom term compare to the top term?

_____

Complete the table and use it for Problems 3 and 4.

Cost of Music Downloads

Number of Songs	1	2	3	4	5
Cost in Dollars	$0.99	$1.98			

3. Describe a relationship shared by the corresponding terms.

_____

_____

4. What would be the cost of downloading 6 songs?

_____

7-4 Name _____ Date _____

Remembering

Solve.

Show your work.

1. Manny has 40 ounces of butter that he is cutting into 1.25-ounce slices. How many slices will he have?

_____

2. Tracy is running in a 5.25-kilometer race on Saturday. A marathon is approximately 42 kilometers. How many times as long as Tracy's race is a marathon?

_____

Write an equation to solve the problem. Use mental math or estimation to show that your answer is reasonable.

3. Each Saturday morning, Janie works 5 hours and earns $35.75. How much does Janie earn for each hour she works?

Equation: _____

Estimate: _____

_____

Evaluate the expression.

4. $120 \div (t \cdot 3)$ for $t = 4$

5. $m \cdot 2\frac{2}{3}$ for $m = 5$

6. $4 \cdot (2 + c)$ for $c = 8$

7. $7\frac{1}{2} - p$ for $p = \frac{5}{6}$

8. $60 - z \div 2$ for $z = 20$

9. $x \div 0.9$ for $x = 3.6$

10. Stretch Your Thinking Create your own numerical pattern. Write the starting number, the rule, and the first 5 terms in the pattern. Then write an expression for the tenth term.

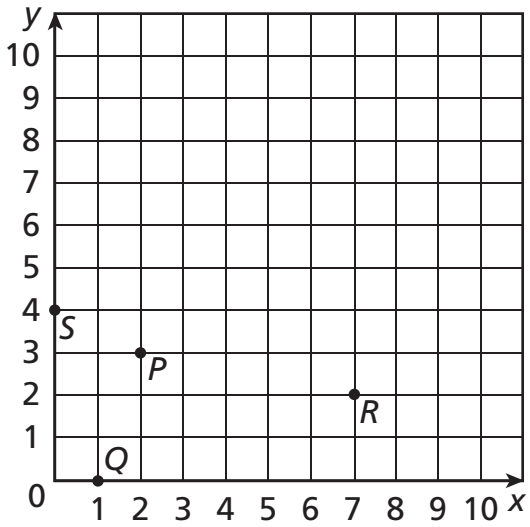
_____

_____

7-5 **Homework**

Name _____ Date _____

Use the coordinate plane below to answer the questions.



Write an ordered pair to represent the location of each point.

1. point *P* _____ **2.** point *Q* _____ **3.** point *R* _____ **4.** point *S* _____

Plot and label a point at each location.

5. point *W* at (3, 9) **6.** point *X* at (3, 5) **7.** point *Y* at (9, 5)

Solve.

8. Suppose points *W*, *X*, and *Y* represent three vertices of rectangle *WXYZ*. Where should point *Z* be plotted?

_____

Plot and label point *Z*. Then use a ruler to draw the rectangle.

9. What ordered pair represents the point at the center of the rectangle?

_____

10. Use subtraction to find the lengths of segments *WX* and *XY*. Show your work.

_____

7-5 Name _____ Date _____

Remembering

Divide.

1. $0.9\overline{)54}$

2. $0.09\overline{)27}$

3. $1.2\overline{)0.6}$

4. $0.06\overline{)48}$

5. $0.4\overline{)188.4}$

6. $0.08\overline{)56}$

7. **a.** Write the first five terms of a numerical pattern that begins with 5 and then adds 6.

_____

b. Write an expression for the sixth term of the pattern.

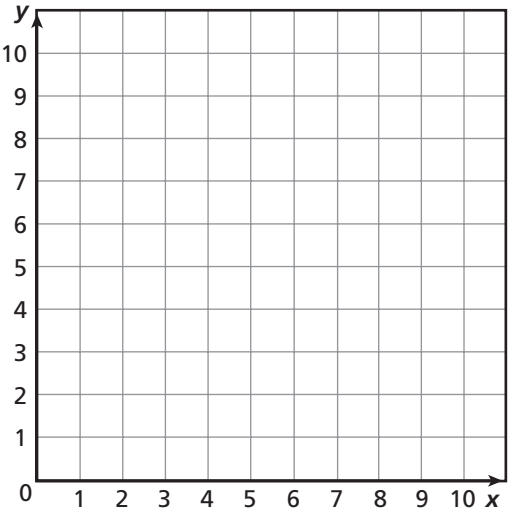
_____

c. Write the sixth term.

_____

8. Stretch Your Thinking List and graph four ordered pairs that are vertices of a rectangle with a perimeter of 16 units.

_____



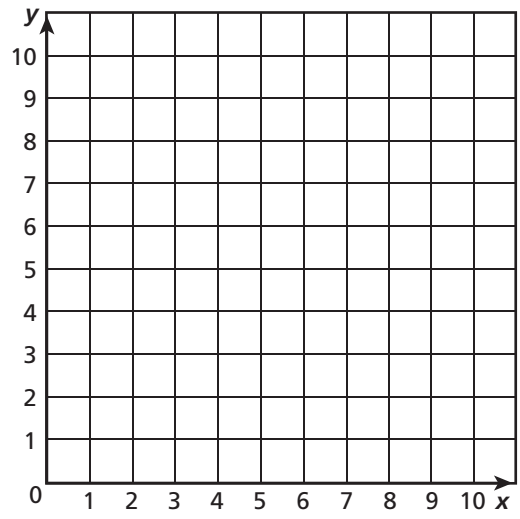
7-6 Homework

Name _____ Date _____

The *add 3* table below shows a numerical pattern in the left column and the result of adding 3 in the right column.

add 3	
0	3
1	
2	
3	
4	

(*x*, *y*)
(____, ____)
(____, ____)
(____, ____)
(____, ____)
(____, ____)



1. Complete the *add 3* table.

2. Complete the (*x, y*) table.

3. Each (*x, y*) pair of terms represents a point. Graph and connect the points.

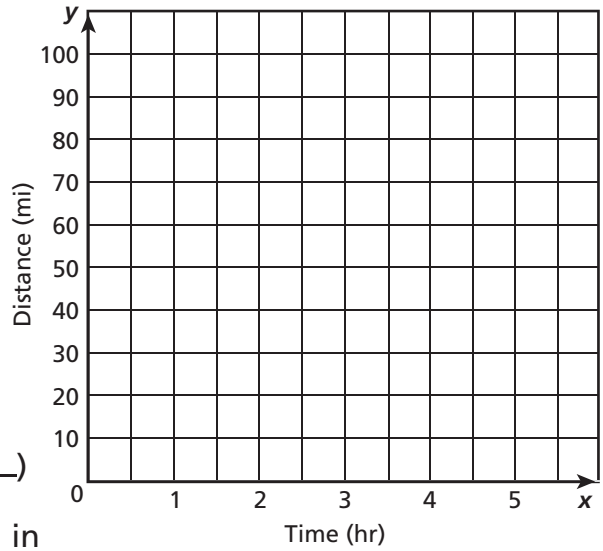
A freight train is traveling at a constant speed of 20 miles per hour.

4. Complete the table to show the distance the train will travel in 0, 1, 2, and 3 hours.

Time (hr)	0	1	2	3
Distance (mi)		20		

5. Write the ordered (*x, y*) pairs the data represent. Then graph and connect the points and extend the line.

(____, ____) (____, ____) (____, ____) (____, ____)



6. How far would you expect the train to travel in $2\frac{1}{2}$ hours? Explain your answer.

_____

_____

7-6 Name Date

Remembering

Multiply.

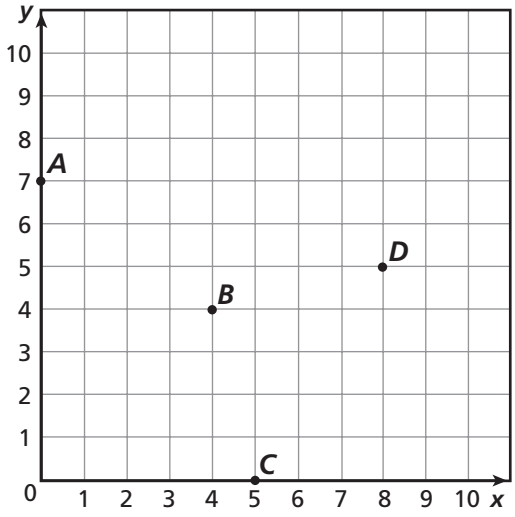
1. 76 × 4

2. 199 × 6

3. 7,907 × 2

4. 98 × 78

Use the coordinate plane below to answer the questions.



Write an ordered pair to represent the location of each point.

5. point *A* _____

6. point *B* _____

7. point *C* _____

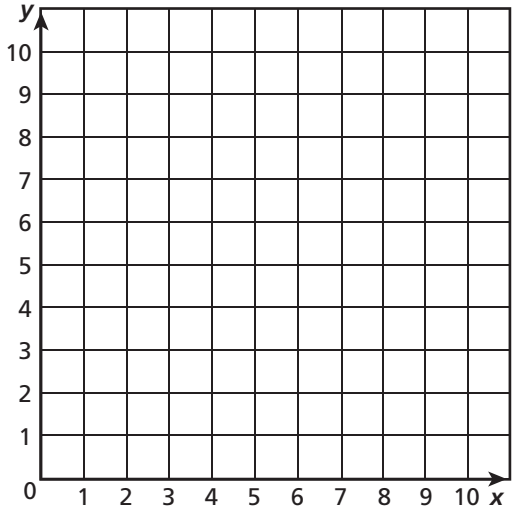
8. point *D* _____

9. Stretch Your Thinking Give the ordered pair for a point *E* so that when the points *B*, *D*, *E*, and *C* are connected (in that order), a square is formed. Then, find the area of square *BDEC*.

_____

Name _____ Date _____

1. On the coordinate plane below, plot and label points to design your own constellation. When you return to class, share your constellation with your class.



2. Write the name of your constellation.

_____

3. Write the order in which your points are to be connected.

_____

_____

_____

4. Explain how you can tell that two points will be on the same horizontal line just by looking at their coordinates.

_____

_____

5. Explain how you can tell that two points will be on the same vertical line just by looking at their coordinates.

_____

_____

7-7 Name _____ Date _____

Remembering

Write and solve an equation to solve the problem.

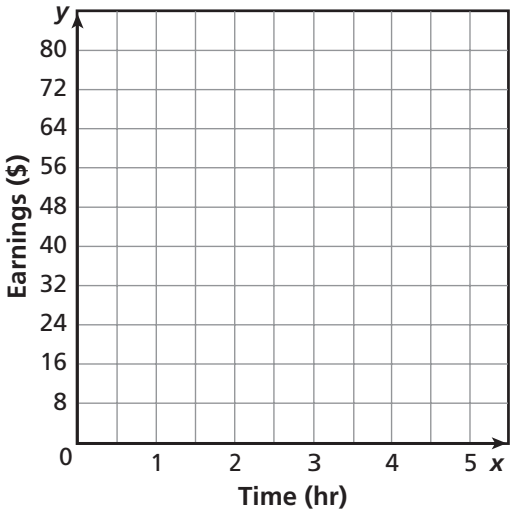
1. A group of 25 classmates visits an amusement park. When they arrive, $\frac{3}{5}$ of the students want to ride the fastest roller coaster first. How many students is this?

_____

Nicole makes $8 per hour working at a daycare center.

2. Complete the table.

Time (hr)	0	1	2	3
Earnings ($)		8		



3. Write the ordered (*x, y*) pairs the data represent. Then graph and connect the points and extend the line.

_____, _____, _____, _____

4. How much money would Nicole make in $2\frac{1}{2}$ hours? Explain your answer.

_____

_____

5. Stretch Your Thinking Which points listed lie on the line? Which points do not lie on the line? Explain.

(0, 5) (1, 5) (2, 4), (3, 6), (4, 3)

_____

_____

_____

_____

_____