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 · (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*. ______

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

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

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

6.
$$64 + 46 - 21 + 29$$
 7. $72 \div (7 - 1) \cdot 3$

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

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

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

11. 32 ÷ (2.3 + 1.7) · 3 12.
$$(1\frac{1}{2} - \frac{3}{4}) \times \frac{1}{4}$$

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

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

16.
$$10 - 4 + 2 - 1$$

Evaluate the expression.

1.
$$m \div 0.3$$
 for $m = 1.8$ 2. $3\frac{1}{3} - x$ for $x = \frac{5}{6}$

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 $x = 2$

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

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

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 $h = 4.9$

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?

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

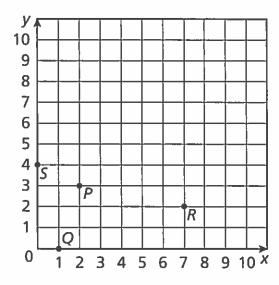
Number of Songs	1	2	3	4	5
Cost in Dollars	\$0.99	\$1.98			

3. Describe a relationship shared by the corresponding terms.

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

UNIT 7 LESSON 4

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?

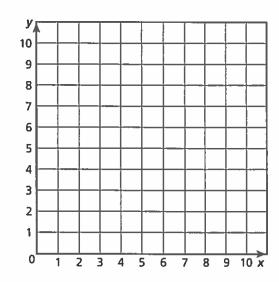
Plot and label point Z. Then use a ruler to draw the rectangle.

- 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.

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,)	/)
(,)
()
(,	
(,)
(, _)



- 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.

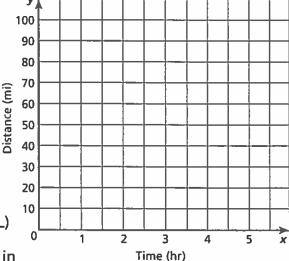
A freight train is traveling at a constant speed of 20 miles per hour.

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		

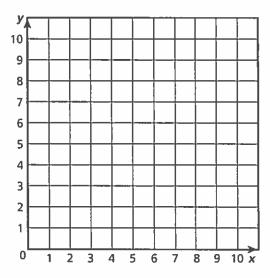
5. Write the ordered (x, y) pairs the data represent. Then graph and connect the points and extend the line.

(___, ___) (___, ___) (___, ___) (___, ___)



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

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.