

acadience<sup>®</sup>math

# Concepts and Applications

## Grade 5 | Benchmark Assessment

### Teacher Key

Published by Acadience Learning Inc.

Available: [www.acadiencelearning.org](http://www.acadiencelearning.org)

**Scoring Direction**

←  
Right to Left

or

→  
Left to Right

# Acadience® Math / Concepts and Applications Grade 5 / Benchmark 1 / Teacher Key

Total: \_\_\_\_\_

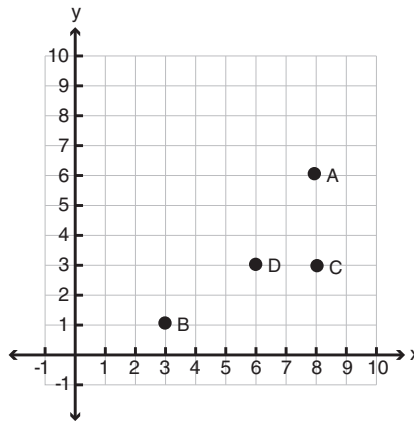
1. Fill in the blank with > (greater than), = (equal to), or < (less than):

Box 1	>, =, <	Box 2
8.160	<	8.167
2.875	>	2.871
9.940	<	9.949

exact answer, 1 | 2  
points per box 2 | 4  
3 | 6

2. Plot the following ordered pairs on the coordinate plane and **label each pair** with the correct letter.

- A. (8, 6)
- B. (3, 1)
- C. (8, 3)
- D. (6, 3)



exact answer, 1 | 1  
points per segment 2 | 2  
3 | 3  
(correctly plotted points) 4 | 4

3. Solve:

$$4 \times (8 - 6) + 4 = 12$$

correct digits 1 | 5  
2 | 10

4. Pablo made pancakes. He used 9 cups of milk, 9 cups of buttermilk, and 6 cups of water. How many quarts of liquid did he use, if 1 quart = 4 cups? 6 quarts of liquid.

correct digits 1 | 9

5. Carolina is baking a chocolate cake. She needs  $\frac{1}{8}$  cup of brown sugar and  $\frac{2}{3}$  cup of cocoa powder. How many total cups of the ingredients does she need?  $\frac{19}{24}$  cup(s).

1 | 2  
2 | 4  
3 | 6  
correct digits 4 | 8

6. Round...

Number	...to the nearest tenth	...to the nearest hundredth	...to the nearest thousandth
7.4782	7.5	7.48	7.478
6.4356	6.4	6.44	6.436

1 | 1  
2 | 2  
3 | 3  
4 | 4  
5 | 5  
exact answer, 6 | 6  
points per box 6 | 6

# Acadience® Math / Concepts and Applications

## Grade 5 / Benchmark 1 / Teacher Key

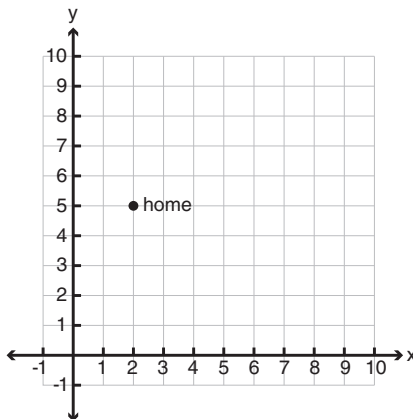
7. Your home is represented by the ordered pair (2, 5).

Go up 3 units to the mailbox.

Go right 4 units to your neighbors' house.

Go down 4 units to your friend's house.

What ordered pair on the coordinate plane represents your friend's house? ( 6, 4 )



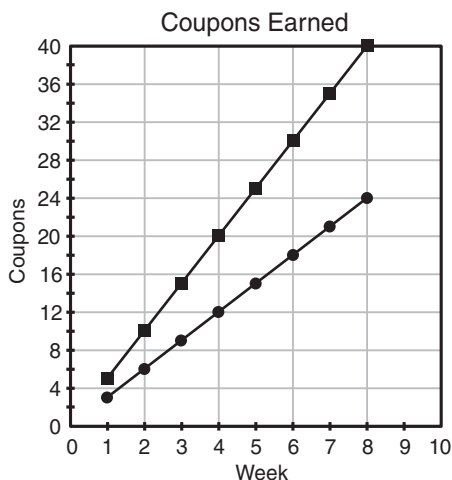
exact answer, 1 | 2  
points per line 2 | 4

8. Courtney and Catherine each earned coupons for having good behavior at school.

A. Complete the table that represents the number of coupons each has earned:

Week	Total Coupons Courtney Earned	Total Coupons Catherine Earned
1	3	5
2	6	10
3	9	15
4	12	20
5	15	25
6	18	30
7	21	35
8	24	40

B. Plot the points on the coordinate plane and make a line graph for each person:



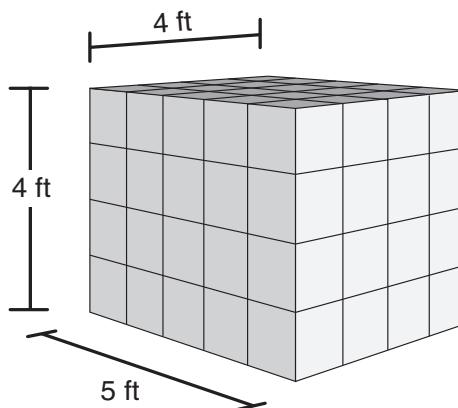
● Courtney  
■ Catherine

A. exact answer, 1 | 2  
points per box 6 | 8

B. exact answer, 1 | 1  
points per segment (correct line plotted) 2 | 2

9. Determine the volume of the shape.

80 ft<sup>3</sup>.



correct digits 1 | 4  
2 | 9

10.  $\frac{1}{3}$  of the kids at April's birthday party are wearing party hats.  $\frac{1}{8}$  of the hats are red. What fraction of the kids at the party are

wearing red hats?  $\frac{1}{24}$  are wearing red hats.

correct digits 1 | 1  
2 | 3  
3 | 5

**Acadience® Math / Concepts and Applications**  
**Grade 5 / Benchmark 1 / Teacher Key**

11. For lunch, Jake bought a piece of pizza for \$1.79 and an orange juice for \$1.29. He paid with a \$5 bill. How much change did he get back? \$ 1.92

1	4
2	9
3	14
4	19

  
 correct digits

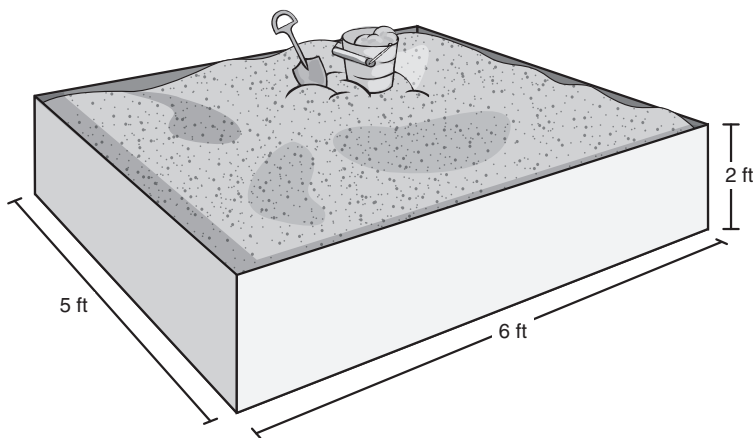
12. Write the part of this problem you would solve first in order to get to the correct answer: 2 + 4

**6 x (2 + 4) + 7 = 43**

exact answer,  
 points per line 1 | 2

13. The sandbox is 5 feet long, 6 feet wide, and 2 feet deep. What is the volume of the sandbox?

60 ft<sup>3</sup>



1	4
2	9

  
 correct digits

14. Your teacher has 36 slices of cake. The slices are divided equally among 10 children. How many slices of cake does each student get? Write your answer as a decimal. 3.6 slices of cake.

1	1
2	3
3	7

  
 correct digits

15. In the space provided, write out the full equation using the correct order of operations:

Divide 8 by 2, then add 4: 8 ÷ 2 + 4 = 8  
 or equivalent

exact answer,  
 points per line 1 | 3


16. How many pounds of beans would each person get if 4 people shared  $\frac{1}{4}$  of a pound of beans equally?

1  
16 of a pound of beans.

1	2
2	4
3	6

  
 correct digits

**Scoring Direction**

 Right to Left  
 or  
 Left to Right

# Acadience® Math / Concepts and Applications Grade 5 / Benchmark 2 / Teacher Key

Total: \_\_\_\_\_

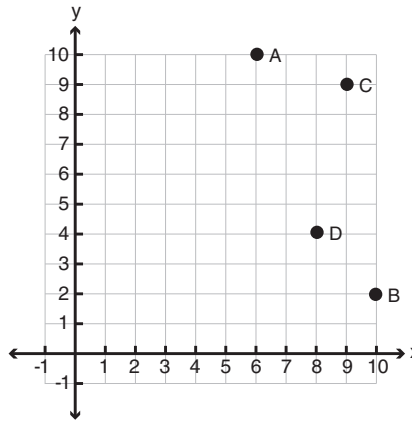
1. Fill in the blank with > (greater than), = (equal to), or < (less than):

Box 1	>, =, <	Box 2
2.769	>	2.765
7.670	<	7.678
4.521	<	4.525

exact answer,  $\frac{1}{2}$  | 2  
 points per box 3 | 4

2. Plot the following ordered pairs on the coordinate plane and label each pair with the correct letter.

- A. (6, 10)
- B. (10, 2)
- C. (9, 9)
- D. (8, 4)



exact answer,  $\frac{1}{2}$  | 1  
 points per segment 3 | 2  
 (correctly plotted points) 4 | 3

3. Solve:

$$8 \times (9 - 6) + 5 = 29$$

correct digits  $\frac{1}{2}$  | 6  
 12

4. Hector bought some food at the store. He purchased 20 ounces of salami, 43 ounces of chicken, and 17 ounces of cheese. How many pounds of food did Hector buy, if 1 pound = 16 ounces? 5 pounds of food.

correct digits 1 | 13

5. Sophia is baking a carrot cake. She needs  $\frac{1}{3}$  cup of sugar and  $\frac{1}{2}$  cup of carrots. How many total cups of ingredients does she need?

$$\frac{5}{6} \text{ cup(s).}$$

correct digits  $\frac{1}{2}$  | 3  
 6

6. Round...

Number	...to the nearest tenth	...to the nearest hundredth	...to the nearest thousandth
3.1834	3.2	3.18	3.183
9.1621	9.2	9.16	9.162

exact answer,  $\frac{1}{2}$  | 1  
 points per box 3 | 2  
 4 | 3  
 5 | 4  
 6 | 5

# Acadience® Math / Concepts and Applications

## Grade 5 / Benchmark 2 / Teacher Key

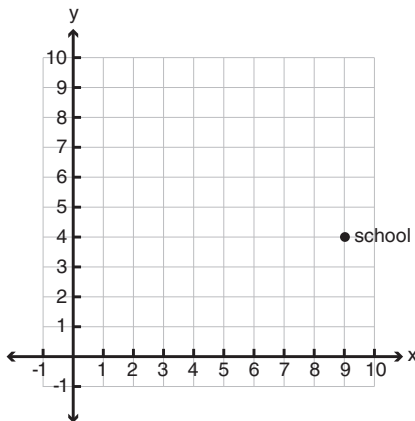
7. Your school is represented by the ordered pair (9, 4).

Go up 1 unit to the playground.

Go left 3 units to the library.

Go down 2 units to the bus stop.

What ordered pair on the coordinate plane represents the bus stop? ( 6, 3 )



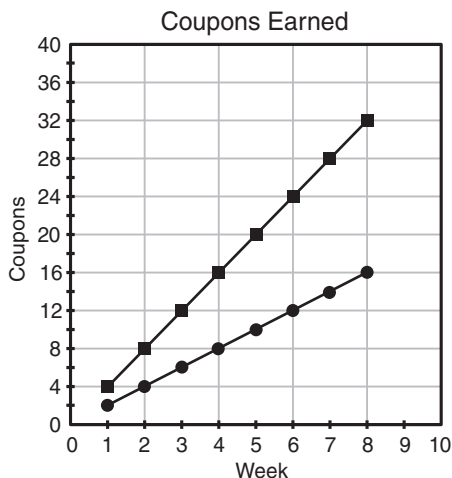
exact answer, 1 | 2  
points per line 2 | 4

8. Ross and Madeline earned coupons for doing work around the house.

A. Complete the table that represents the number of coupons each has earned:

Week	Total Coupons Ross Earned	Total Coupons Madeline Earned
1	2	4
2	4	8
3	6	12
4	8	16
5	<u>10</u>	<u>20</u>
6	<u>12</u>	<u>24</u>
7	<u>14</u>	<u>28</u>
8	<u>16</u>	<u>32</u>

B. Plot the points on the coordinate plane and make a line graph for each person:



● Ross  
■ Madeline

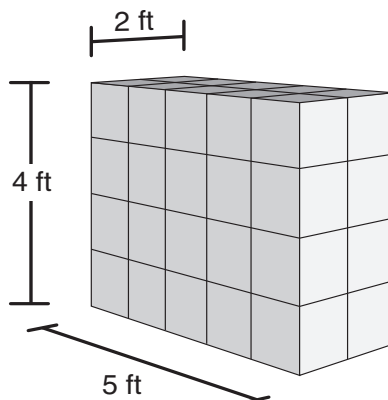
1 | 1  
2 | 2  
3 | 3  
4 | 4  
5 | 5  
6 | 6  
7 | 7  
8 | 8

A. exact answer,  
points per box

B. exact answer,  
points per segment  
(correct line plotted) 1 | 1  
2 | 2

9. Determine the volume of the shape.

40 ft<sup>3</sup>.



correct digits 1 | 4  
2 | 9

10.  $\frac{2}{5}$  of the kids at Natalie's birthday party are wearing party hats.  $\frac{1}{3}$  of the hats are red. What fraction of the kids at the party are

wearing red hats?  $\frac{2}{15}$  are wearing red hats.

1 | 1  
2 | 3  
3 | 5

**Acadience® Math / Concepts and Applications**  
**Grade 5 / Benchmark 2 / Teacher Key**

11. Paul bought a flower for his mother for \$4.35 and bought a flower for his grandmother for \$2.37. He paid with a \$10 bill. How much change will he get back? \$ 3.28

1	5
2	10
3	15
4	20

 correct digits

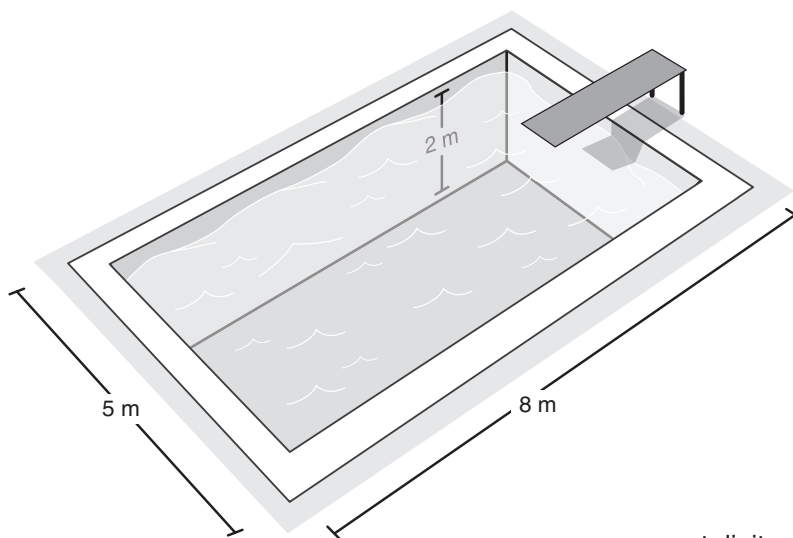
12. Write the part of this problem you would solve first in order to get to the correct answer:  $9 \times 4$

**$9 \times 4 + 7 + 4 = 47$**

exact answer,  
points per line 1 | 2

13. Todd's dad is building a pool that is 8 meters long, 5 meters wide, and 2 meters deep. What is the volume of the pool?

80 m<sup>3</sup>.



correct digits 1 | 4  
2 | 9

14. Your teacher has 28 sheets of stickers. They are divided equally among 10 children. How many sheets of stickers does each child get? Write your answer as a decimal. 2.8 sheets of stickers.

1	1
2	3
3	7

 correct digits

15. In the space provided, write out the full equation using the correct order of operations:

Divide 6 by 6, then add 8:  $6 \div 6 + 8$  = 9  
or equivalent

exact answer,  
points per line 1 | 3

16. How many pounds of carrots would each person get if 4 people shared  $\frac{3}{8}$  of a pound of carrots equally?

$\frac{3}{32}$  of a pound of carrots.

1	2
2	4
3	6

 correct digits

**Scoring Direction**

Right to Left

or

Left to Right

# Acadience® Math / Concepts and Applications Grade 5 / Benchmark 3 / Teacher Key

Total: \_\_\_\_\_

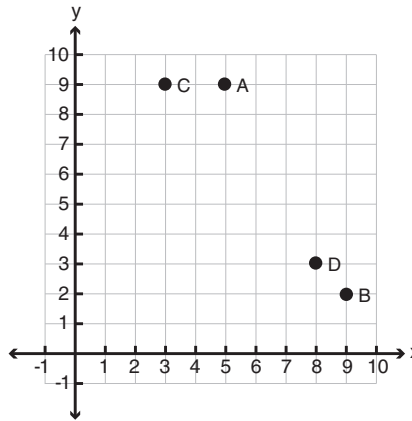
1. Fill in the blank with > (greater than), = (equal to), or < (less than):

Box 1	>, =, <	Box 2
2.185	<	2.186
4.414	>	4.413
9.574	>	9.571

exact answer, 1 | 2  
points per box 2 | 4  
3 | 6

2. **Plot** the following ordered pairs on the coordinate plane and **label each pair** with the correct letter.

- A. (5, 9)
- B. (9, 2)
- C. (3, 9)
- D. (8, 3)



exact answer, 1 | 1  
points per segment 2 | 2  
3 | 3  
4 | 4

3. Solve:

$$3 \times (7 - 3) + 6 = 18$$

correct digits 1 | 6  
2 | 12

4. Scott has some pieces of rope. One is 18 inches, the next is 11 inches, and the last is 19 inches. How many feet of rope does Scott have, if 1 foot = 12 inches? 4 feet of rope.

correct digits 1 | 13

5. There was  $\frac{2}{3}$  of a pepperoni pizza left over and  $\frac{1}{5}$  of a cheese pizza left over. How much total pizza was left over?

$$\frac{13}{15} \text{ of a pizza.}$$

1 | 2  
2 | 4  
3 | 6  
correct digits 4 | 8

6. Round...

Number	...to the nearest tenth	...to the nearest hundredth	...to the nearest thousandth
4.2223	4.2	4.22	4.222
4.3787	4.4	4.38	4.379

1 | 1  
2 | 2  
3 | 3  
4 | 4  
5 | 5  
exact answer, 6 | 6  
points per box 6 | 6



# Acadience® Math / Concepts and Applications

## Grade 5 / Benchmark 3 / Teacher Key

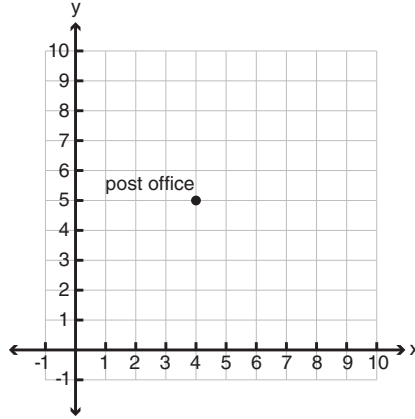
7. The post office is represented by the ordered pair (4, 5).

Go up 4 units to the store.

Go right 1 unit to the bank.

Go down 5 units to your house.

What ordered pair on the coordinate plane represents your house? ( 5, 4 )



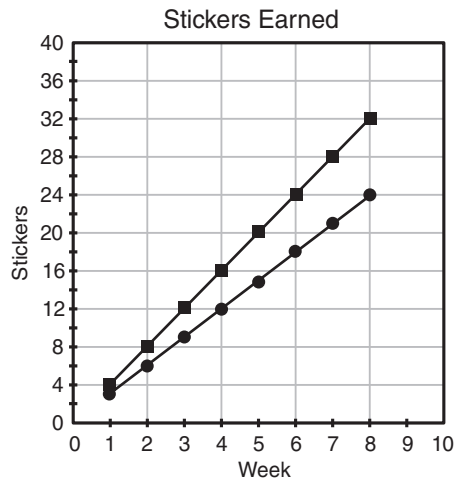
exact answer, 1 | 2  
points per line 2 | 4

8. Noah and Lily earned stickers on their homework.

A. Complete the table that represents the number of stickers each has earned:

Week	Total Stickers Noah Earned	Total Stickers Lily Earned
1	3	4
2	6	8
3	9	12
4	12	16
5	15	20
6	18	24
7	21	28
8	24	32

B. Plot the points on the coordinate plane and make a line graph for each person:

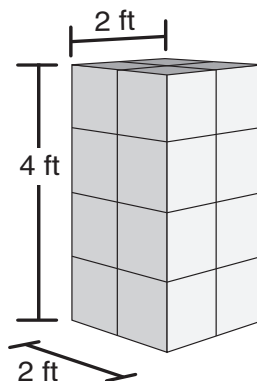


A. exact answer, points per box 1 | 1  
2 | 2  
3 | 3  
4 | 4  
5 | 5  
6 | 6  
7 | 7  
8 | 8

B. exact answer, points per segment (correct line plotted) 1 | 1  
2 | 2

9. Determine the volume of the shape.

16 ft<sup>3</sup>.



correct digits 1 | 3  
2 | 7

10.  $\frac{1}{6}$  of the kids at Ava's birthday party had balloons.  $\frac{1}{4}$  of the balloons were blue. What fraction of the kids at the party had blue

balloons?  $\frac{1}{24}$  had blue balloons.

correct digits 1 | 1  
2 | 3  
3 | 5

**Acadience® Math / Concepts and Applications**  
**Grade 5 / Benchmark 3 / Teacher Key**

11. Emma bought a skirt for \$3.69 and a shirt for \$2.71. She paid with a \$10 bill. How much change would she get back?

\$ 3.60

	1	5
	2	10
	3	15
correct digits	4	20

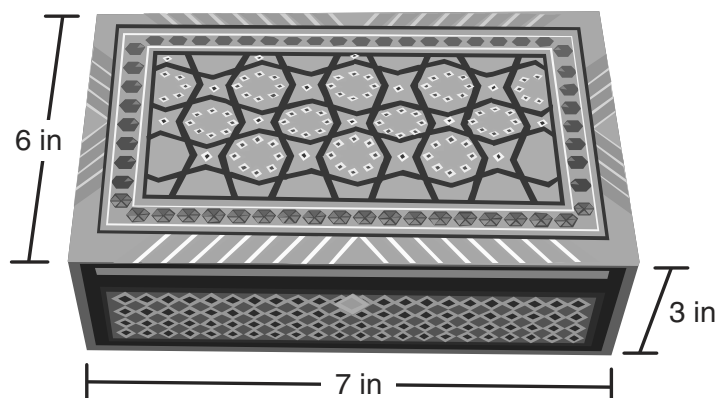
12. Write the part of this problem you would solve first in order to get to the correct answer: 7 x 9

**7 x 9 + 5 + 2 = 70**

exact answer,  
points per line 1 | 2

13. Dana has a jewelry box that is 7 inches wide, 6 inches long, and 3 inches tall. What is the volume of the jewelry box?

126 in<sup>3</sup>.



	1	3
	2	7
correct digits	3	10

14. Your teacher has 56 crackers. They are divided equally among 10 children. How many crackers does each child get? Write your answer as a decimal. 5.6 crackers.

	1	1
	2	3
correct digits	3	7

15. In the space provided, write out the full equation using the correct order of operations:

Divide 6 by 3, then add 2: 6 ÷ 3 + 2 = 4  
or equivalent

exact answer,  
points per line 1 | 3

16. How many pounds of apples would each person get if 4 people shared  $\frac{1}{7}$  of a pound of apples equally?

1  
28 of a pound of apples.

	1	2
	2	4
correct digits	3	6