

1. The identity property that uses 1 applies to _____.

(A) \times and \div
 (B) $+$ and $-$
 (C) $-$ and \div
 (D) none of the above

2. In the order of operations, if there are no parentheses, _____ first.

(A) $+$ or $-$
 (B) \times or \div
 (C) both A and B
 (D) none of the above

3. The value of $6 \times (7 + 8)$ is _____.

(A) $42 + 48$
 (B) 6×15
 (C) 90
 (D) all of the above

4. In 5^2 , the 2 is the _____.

(A) base number
 (B) order
 (C) exponent
 (D) none of the above

5. In $4 - x = 4$, the _____ property applies.

(A) commutative
 (B) associative
 (C) identity
 (D) none of the above

Complete the table. Use the table to answer questions 6-8.

quarters	1		3
nickels	5	10	

6. 10 nickels = _____ quarters. (A) 2 (B) 5 (C) 3 (D) none of the above

7. 3 quarters = _____ nickels. (A) 5 (B) 10 (C) 15 (D) none of the above

8. The ratio of nickels to quarters is _____. (A) 1:5 (B) 5:1 (C) 5 - 1 (D) none of the above

9. Each soccer team has 11 players. What is the ratio of players to teams?

(A) 10:1
 (B) 12:1
 (C) 11:1
 (D) none of the above

10. There are 9 soccer teams at the tournament. How many players are there?

(A) 20
 (B) 2
 (C) 100
 (D) none of the above

Complete the tables. Use them to answer problems 21–23.

Table A

a	1			
$a+2$	3			

Table B

b	1			
$2b$	2			

21. In Table A, the values for $a+2$ are _____ numbers.
 (A) always odd
 (B) always even
 (C) odd and even
 (D) none of the above
22. In Table B, the values for $2b$ are _____ numbers.
 (A) always odd
 (B) always even
 (C) odd and even
 (D) none of the above
23. The values of a and b are located on the _____ of a coordinate graph.
 (A) x -axis
 (B) y -axis
 (C) origin
 (D) none of the above

24. _____, _____, _____, _____, _____, _____, _____, _____
 (A) 3, -4, 4 (B) -4, -5, -6 (C) 3, 4, 5 (D) none of these

25. _____, _____, _____, _____, _____, _____, _____, _____
 (A) $\frac{11}{12}, \frac{10}{11}, \frac{9}{10}$ (B) $\frac{10}{11}, \frac{8}{9}, \frac{6}{7}$ (C) $\frac{13}{14}, \frac{15}{16}, \frac{17}{18}$ (D) none of these

26. _____, _____, _____, _____, _____, _____, _____, _____
 (A) 2.0, 3.0 (B) 10, 20 (C) 1.3, 1.5 (D) none of these

27. What is the value of x when $x^2 = 100$?
 (A) 0
 (B) 1
 (C) 10
 (D) none of the above
28. The distance between (1,6) and (-1,6) on a coordinate graph is _____.
 (A) 12
 (B) 6
 (C) 0
 (D) none of the above

9. In 5^3 , the 5 is the _____.

Ⓐ exponent
 Ⓑ order
 Ⓒ base number
 Ⓓ none of the above

10. An exponent is the number of times the base number is _____.

Ⓐ multiplied
 Ⓑ subtracted
 Ⓒ added
 Ⓓ none of the above

11. Powers of 10, exponents with 10 as the base number, show _____.

Ⓐ place value
 Ⓑ squares
 Ⓒ roots
 Ⓓ none of the above

12. The exponent with a base number of 10 is the _____ in the place value.

Ⓐ number of 0s
 Ⓑ number of 1s
 Ⓒ number of 5s
 Ⓓ all of the above

13. The identity factor for subtraction is 2.

Ⓐ True
 Ⓑ False

14. $n \div 3 = n$ is an example of the associative property.

Ⓐ True
 Ⓑ False

15. $(7 + 3) + 4 = 7 + (3 + 4)$ is an example of the associative property.

Ⓐ True
 Ⓑ False

16. Properties of operations are laws that apply to them.

Ⓐ True
 Ⓑ False

17. In a list of different operations, perform the same operation from right to left.

Ⓐ True
 Ⓑ False

18. The associative property uses order and parentheses to define equal expressions.

Ⓐ True
 Ⓑ False

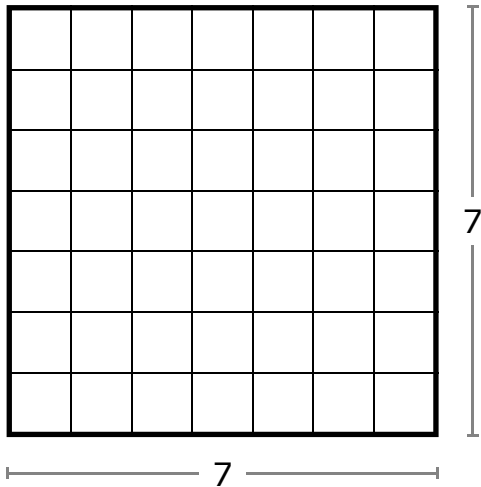
19. $20 \div 10 = (10 \div 10) + (10 \div 10)$ is an example of the distributive property.

Ⓐ True
 Ⓑ False

20. The identity factor for multiplication is 0.

Ⓐ True
 Ⓑ False

Exponents

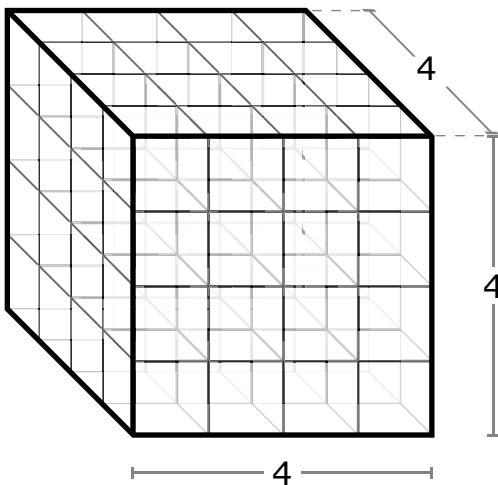


$$7^2 = 7 \text{ squared}$$

7 is the base number.

2 is the exponent for the number of times the base number is multiplied.

$$7 \times 7 = \underline{\hspace{2cm}}$$



$$4^3 = 4 \text{ cubed}$$

_____ is the base number.

_____ is the exponent for the number of times the base number is multiplied.

$$4 \times 4 \times 4 = \underline{\hspace{2cm}}$$

11. $9 + (3 \times 2) + (10 \div 5) = \underline{\hspace{2cm}}$ (A) 15 (C) 17
(B) 16 (D) 18
-
12. In 5^4 , the 4 is the _____. (A) product (C) factor
(B) exponent (D) divisor
-
13. In 7^3 , the 7 is the _____. (A) product (C) difference
(B) sum (D) base number
-
14. $6^3 = \underline{\hspace{2cm}}$ (A) 18 (C) 9
(B) 216 (D) 108
-
15. 4^2 is _____ 5^2 . (A) 9 less than (C) 2 less than
(B) 9 greater than (D) 2 greater than
-
16. $10^3 = \underline{\hspace{2cm}}$ (A) 1,000 (C) 30
(B) 100 (D) 13
-
17. 3^4 is _____ 3×4 . (A) equal to (C) 69 less than
(B) 69 greater than (D) 24 greater than
-
18. $70,000 = \underline{\hspace{2cm}}$ (A) 7×10^5 (C) 70×10
(B) 7×10^4 (D) 700×1
-
19. $10^2 \times 10^3 = \underline{\hspace{2cm}}$ (A) 10^6 (C) 10^4
(B) 10^1 (D) 10^5
-
20. Exponents are used in writing _____. (A) large numbers (C) both A and B
(B) scientific notation (D) none of the above

1. A cake recipe calls for 3 cups of flour and 2 cups of oil.
 Show the ratio of oil to flour. : _____

A. How many cups of oil are needed for 4 cakes? _____

B. How many cakes can be made with 6 cups
 of flour? _____

2. A motorcycle travels 300 miles on 4 gallons of gasoline.
 A car travels 300 miles on 10 gallons of gasoline.
 Show both ratios.

motorcycle = _____ : _____ car = _____ : _____

A. How far does the motorcycle travel on
 10 gallons of gasoline? _____

B. How far does the car travel on
 4 gallons of gasoline? _____

1. A ratio compares _____ quantities or amounts.

(A) 2
(B) 3
(C) 4
(D) none of the above

2. A ratio can be expressed as _____.

(A) 2:3
(B) 2 to 3
(C) $\frac{2}{3}$
(D) all of the above

3. A rate is a _____.

(A) race
(B) type of ratio
(C) rank
(D) none of the above

4.

Pencils	5	10	n
Pens	3	6	9

 $n =$

(A) 11
(B) 12
(C) 13
(D) none of the above

5.

Weeks	1	2	3	n
Days	7		21	

 $n =$

(A) 14
(B) 4
(C) 28
(D) none of the above

6.

Minutes			n	
Hours			3	

 $n =$

(A) 60
(B) 120
(C) 180
(D) none of the above

7.

Quarters					n
Nickels					125

 $n =$

(A) 24
(B) 25
(C) 26
(D) none of the above

8.

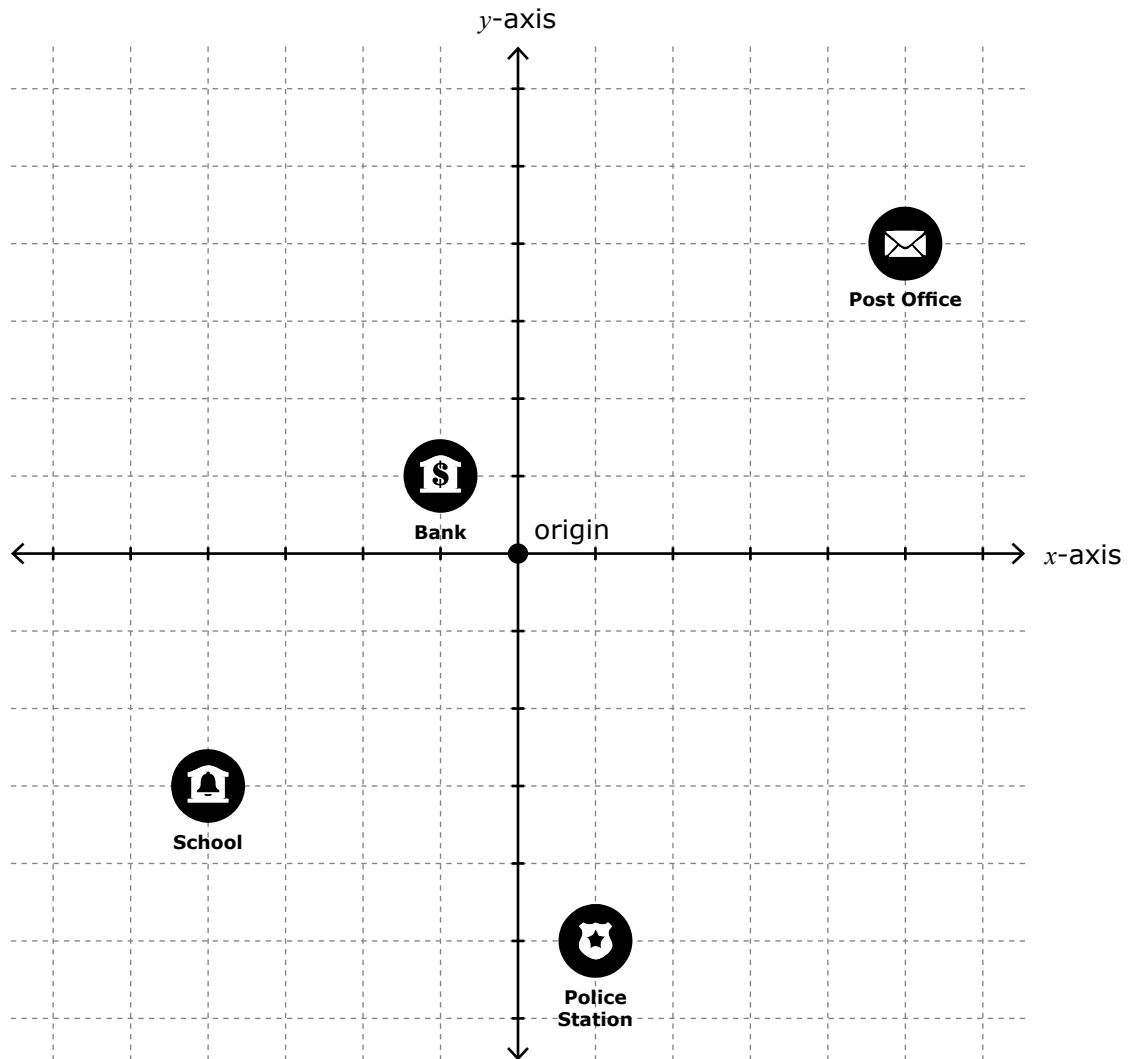
Bottles			3		n
Dollars			5		15

 $n =$

(A) 10
(B) 5
(C) 4
(D) none of the above

City Map of Elizabeth

(Use with activity sheet 70)



1. Label each quadrant as a direction.
2. Label the x -axis as Main Street.
3. Label the y -axis as Central Avenue.
4. From the origin on the x -axis, the numbers to the right are east, The numbers to the left are west.
5. From the origin on the y -axis, the numbers at the top are north, the numbers at the bottom are south.
6. Each number is 1 block.

Write an example of how each expression might be used.

1. $\$5.75x$ _____

2. $(640 - a)$ _____

3. $1\frac{1}{2} + n$ _____

4. $p \div \frac{1}{3}$ _____

How are each pair of expressions different?

5. $84 - y$ and $y - 84$ _____

6. $t + t + t$ and $3t$ _____

Write an example of how each expression might be used.

1. $\$5.75x$ _____

2. $(640 - a)$ _____

3. $1\frac{1}{2} + n$ _____

4. $p \div \frac{1}{3}$ _____

How are each pair of expressions different?

5. $84 - y$ and $y - 84$ _____

6. $t + t + t$ and $3t$ _____

$$4y + 1$$

When $y = 1$, $4y + 1 =$ _____.

When $y = 2$, $4y + 1 =$ _____.

When $y = 3$, $4y + 1 =$ _____.

When $y = 4$, $4y + 1 =$ _____.

$$\frac{1}{2}c + 5$$

When $c = 0$, $\frac{1}{2}c + 5 =$ _____.

When $c = 2$, $\frac{1}{2}c + 5 =$ _____.

When $c = 4$, $\frac{1}{2}c + 5 =$ _____.

When $c = 6$, $\frac{1}{2}c + 5 =$ _____.

$$7x - 2$$

For which value of x does
 $7x - 2 = 12$?

- (A) $x = 0$
- (B) $x = 1$
- (C) $x = 2$

$$30 - 3w$$

For which value of w does
 $30 - 3w = 15$?

- (A) $w = 0$
- (B) $w = 5$
- (C) $w = 10$

$$.25p + 1$$

What value of x makes
 $.25p + 1 = 2.25$?

- (A) $p = 3$
- (B) $p = 4$
- (C) $p = 5$

$$2b - .5$$

What value of b makes
 $2b - .5 = 11.5$?

- (A) $b = 2$
- (B) $b = 4$
- (C) $b = 6$

1.

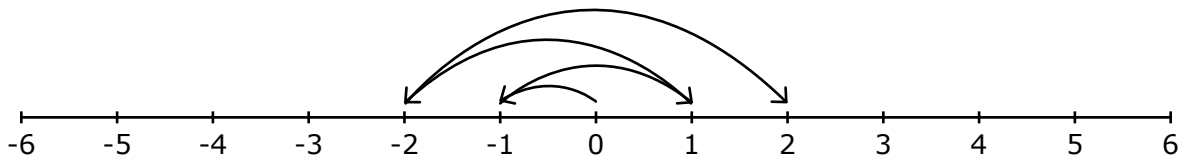
$$\underline{\$5} - \underline{\$1.25} + \underline{\$4} - \underline{\$1.50} + \underline{\$3} - \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

Describe the pattern using words.

I had \$5. I spent \$1.25. I earned \$4. I bought some stamps for \$1.50. I received \$3 from my grandmother. I gave _____ to my brother for lunch money.

The pattern is _____

2.



Complete this pattern on the number line. Start at 0.

Describe the pattern on the number line. Use "right" and "left" in your description.

3.

$$\underline{\frac{1}{5}}, \underline{2}, \underline{\frac{2}{5}}, \underline{4}, \underline{\frac{3}{5}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$$

Describe the pattern.
