

ns: Answer the following question(s).

- 1 Select all options in which the distance between the 2 numbers on the number line is the same as  $|-8 - 4|$ .

- A.  $-8$  and  $4$
- B.  $-8$  and  $-4$
- C.  $8$  and  $4$
- D.  $8$  and  $-4$

- 2 This table shows the monthly change in Sara's bank account balance for each month listed. For example, the account balance change of  $-30$  means that Sara's balance decreased by  $\$30$  from the beginning of the month to the end of the month of February.

Month	Account Balance
	Change (Dollars)
January	+38
February	-30
March	-19
April	+49

Determine whether each statement about Sara's bank account balance is true or false, based on the information in the table.

- A. Sara has less money in her account at the end of February than at the end of any other month.
- B. Sara's account balance is the same at the end of April as it is at the end of January.
- C. Sara has more money in her account at the end of April than she did at the **beginning** of January.

- 3 The weather report predicted that the low temperature would be  $-8$  degrees Fahrenheit. The radio announcer said, "The low temperature was 5 degrees colder than predicted!"

What was the low temperature, in degrees Fahrenheit?

- 4 Enter the value of the  $2.1 + (-3) - (-0.9)$ .

- 5 Select all expressions that equal  $-7 - (-12)$ .

- A.  $7 + (-12)$
- B.  $-7 + (12)$
- C.  $-7 + 12$
- D.  $7 + 12$

Directions: Answer the following question(s).

6 An equation is shown.

$$-20.5 + 10.25$$

What is the value of the expression?

- A. -11.25
- B. -10.25
- C. -9.75
- D. -9.25

7 An equation is shown.

$$8.75 + (-14.5)$$

What is the value of the expression?

- A. -5.75
- B. -5.5
- C. -5.25
- D. 5.75

8 An equation is shown.

$$-25.5 + 5.75$$

What is the value of the expression?

- A. -20.75
- B. -20
- C. -19.75
- D. -18.75

9 An equation is shown.

$$45.75 + (-47.5)$$

What is the value of the expression?

- A. -93.25
- B. -2.25
- C. -2
- D. -1.75

Directions: Answer the following question(s).

10 Select *two* of the expressions that have a value of  $-8$ .

- A.  $-2 + 6$
- B.  $-4 + (-4)$
- C.  $6 + (-14)$
- D.  $11 + (-3)$

11 Using the number line below, determine which of the following expressions are equal to  $-9$ . Select *all* that apply.



- A.  $-12 - (-3)$
- B.  $-5 - 4$
- C.  $1 - (-8)$
- D.  $5 - 14$
- E.  $-10 - 1$

12 An equation is shown.

$$3.5 + (-18.25)$$

What is the value of the expression?

- A.  $-15.25$
- B.  $-14.75$
- C.  $14.75$
- D.  $21.75$

13 What is the value of  $6 - (-8) + (-12) + 4$ ?

- A.  $-2$
- B.  $4$
- C.  $6$
- D.  $28$

14 Which situation will result in a neither positive nor negative number?

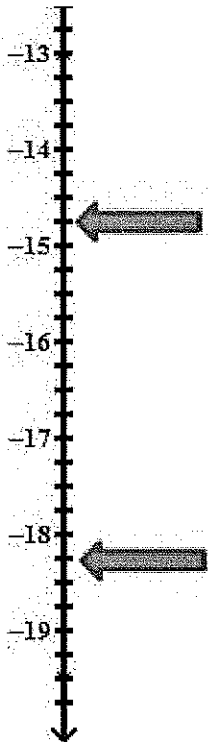
- A. Dan owes his brother \$10 and pays him \$5.
- B. Jill climbs 30 feet uphill, then tumbles down 25 feet.
- C. Molly digs a hole 3 feet deep. Later, her dad fills the hole.
- D. Greg gains 10 yards on one football play, but loses 15 yards on the next play.

Directions: Answer the following question(s).

- 15 Ralph owes the bank \$86.25. He deposits \$80.00 into his account.

What is the current balance of Ralph's account?

- 16 The temperature at noon on a cold winter day was  $-14\frac{3}{4}$  °F. By evening, the temperature had dropped to  $-18\frac{1}{4}$  °F. By how much did the temperature change?



- A. It decreased  $4\frac{1}{2}$  °F
- B. It increased  $4\frac{1}{2}$  °F
- C. It decreased  $3\frac{1}{2}$  °F
- D. It increased  $3\frac{1}{2}$  °F

Directions: Answer the following question(s).

~~17~~ What is the value of the expression below?

~~$$-5\frac{1}{4} - (-1\frac{1}{2} + 3\frac{3}{4})$$~~

~~18~~ What is the value if the expression shown below?

~~$$-6\frac{1}{4} + 4\frac{3}{4}$$~~

~~A.  $-2\frac{1}{2}$~~

~~B.  $-1\frac{1}{2}$~~

~~C.  $-1$~~

~~D.  $1\frac{1}{2}$~~

~~19~~ What is the value of the expression  $-(2\frac{1}{2} - 7) - 6\frac{1}{2}$ ?

~~A.  $-16$~~

~~B.  $-2$~~

~~C.  $5$~~

~~D.  $11$~~

~~20~~ Which of the following statements correctly explains the value of the expression  $5\frac{3}{4} - 7\frac{1}{4}$ ?

~~A. The value of the expression is  $-2\frac{1}{2}$ , since  $(5 - 7) - (\frac{3}{4} - \frac{1}{4}) = -2 - \frac{1}{2} = -2\frac{1}{2}$ .~~

~~B. The value of the expression is  $-1\frac{3}{4}$ , since  $(5 - 7) + (\frac{3}{4} - \frac{1}{4}) = -2 + \frac{1}{4} = -2\frac{3}{4}$ .~~

~~C. The value of the expression is  $-1\frac{1}{2}$ , since  $(5 - 7) + (\frac{3}{4} - \frac{1}{4}) = -2 + \frac{1}{2} = -1\frac{1}{2}$ .~~

~~D. The value of the expression is  $-2\frac{1}{4}$ , since  $(5 - 7) - (\frac{3}{4} - \frac{1}{4}) = -2 - \frac{1}{4} = -2\frac{1}{4}$ .~~

21 Which expression has the greatest value?

A.  $-2(5 - 3) + 22$

B.  $12 - (5 - 6) + 3$

C.  $-1 + (5(-3 + 9))$

D.  $9 - (-2 + 6) + 11$

Directions: Answer the following question(s).

22 If a bank represents deposits with positive numbers and withdrawals as negative numbers, what could  $5 \cdot (-20)$  represent?

- A. Five deposits of \$20
- B. Five withdrawals of \$20
- C. A deposit of \$5 followed by a \$20 withdrawal
- D. A \$5 withdrawal followed by a \$20 deposit

23 Which of the following expressions results in a positive number? Select three that apply.

- A.  $-6(-3)(-2)$
- B.  $-4(-3-1)$
- C.  $-3(-8)$
- D.  $-3(-2+6)$
- E.  $6(4-2)$

24 Enter the value of  $\frac{1}{2}(1.7)$

25 Enter the value of  $(-8)(45)\left(\frac{1}{8}\right)$

26 Over 4 months, a total of \$ 500 was deducted from Wayne's checking account for his auto insurance. Which number sentence **best** illustrates the amount by which Wayne's account changed each month?

- A.  $500 \div 4 = 125$
- B.  $-500 \div -4 = 125$
- C.  $-500 \div 4 = -125$
- D.  $500 \div -4 = -125$

27 Mariana bought a breakfast sandwich every morning for 21 days. Her bank account shows that she spent a total of \$ 94.50 on breakfast sandwiches. Which equation **best** illustrates the amount by which Mariana's bank account changed each morning?

- A.  $94.50 \div 21 = 4.50$
- B.  $94.50 - 21 = 73.50$
- C.  $-94.50 \div 21 = -4.50$
- D.  $-94.50 + 21 = -73.50$

Directions: Answer the following question(s).

28 What is the value of the expression  $-12 \times \frac{2}{3}$ ?

29 Select all quantities that are equal to  $\frac{2}{-9}$ .

A.  $\frac{2}{9}$

B.  $\frac{-2}{-9}$

C.  $\frac{-2}{9}$

D.  $-\frac{2}{9}$

E.  $-\frac{-2}{9}$

30 Which statement about the expression  $-\frac{4}{9} \times -\frac{3}{8}$  is true?

- A. The product is less than  $-1$ .
- B. The product is greater than  $1$ .
- C. The product is a positive number.
- D. The product is less than both factors.

1. The expressions  $5 + 2(x - 7)$  and  $5 + 2x - 14$  are equivalent by the \_\_\_\_\_.

7.EE.1

- A. identity property.
- B. distributive property.
- C. associative property of multiplication.
- D. commutative property of multiplication.

2. What is  $x$  if  $-3x + 6 = 39$ ?

7.EE.3

- A.  $-19$
- B.  $-15$
- C.  $-11$
- D.  $-7$

3. Select the expression equivalent to  $(-13x - 15) - (-9x + 16)$ .

7.EE.1

- A.  $4x - 31$
- B.  $-4x + 1$
- C.  $-4x - 31$
- D.  $-22x - 31$

4. Simplify:

7.EE.1

$$3(2x - 6) + x$$

- A.  $6x - 18$
- B.  $7x - 6$
- C.  $7x - 18$
- D.  $5x - 6 + x$



5. Greeting cards ( $c$ ) and gift bags ( $b$ ) are the same price ( $p$ ). Cassie purchased greeting cards and gift bags, the price of which can be expressed by  $p(c + b)$ . 7.EE.2

Select all the expressions that also represent the price of the greeting cards and gift bags.

- A.  $pcb$
- B.  $pc + b$
- C.  $pc + pb$
- D.  $(b + c)p$

6. The combined weight of 5 student back packs is 36.9 pounds. What is the approximate weight of 1 back pack? 7.EE.3

- A. 6 lbs
- B. 7 lbs
- C. 8 lbs
- D. 9 lbs

7.EE.3

7. Meredith's goal is to read one library book each week. On the first night, she read 14 pages more than  $\frac{1}{7}$  of the pages in the book. If the book has 280 pages, how many pages did she read the first night?

- A. 54
- B. 42
- C. 38
- D. 26

8. When Natasha saves \$13 more, she will have enough money to buy a basic MP3 player. The player she wants to buy costs \$204, which is three times the cost of the basic player. Which equation could be used to determine  $n$ , the number of dollars Natasha has already saved?

- A.  $3n + 13 = 204$
- B.  $n + 13 = 3(204)$
- C.  $n + 3(13) = 204$
- D.  $3(n + 13) = 204$

7.EE.4a

9. Which of the following word problems can be solved using the equation  $10x - 15 = 60$ ? Select two that apply.

- A. Kit buys 10 packages of batteries. After using a \$15 coupon, the batteries cost \$60. What was the original price,  $x$ , in dollars, of each package of batteries?
- B. Ursula bought 10 calculators at a store and paid \$60. Each calculator was on sale for \$15 off. What was the original price,  $x$ , in dollars, of each calculator?
- C. Siobhan originally has \$15. After working as a waiter in a restaurant for \$10 an hour, he now has \$60. How many hours,  $x$ , did Siobhan work at the restaurant?
- D. Gary worked for 10 hours tutoring students at the library. He uses \$15 to pay for gas on his way home. If he has \$60 left after paying for gas, how much money,  $x$ , in dollars, was Gary paid per hour?

7.EE.4a

10. Ayalah purchased a shirt for \$14.65 and a pair of jeans for \$21.99. If she was charged \$2.93 tax, how much change would she receive if she paid with a \$50.00 bill?

- A. \$10.43
- B. \$13.36
- C. \$28.07
- D. \$39.57

7.EE.3

11. Which of the following is NOT an example of the commutative property of addition?

- A.  $x + (-13) = -13 + x$
- B.  $2 + x + 5 = 2 + 5 + x$
- C.  $x - 13 = 13 - x$
- D.  $-x + 5 = 5 + (-x)$

12. A dress costs  $p$  dollars. An 8% sales tax must be added to the cost of the dress. Martha wants to multiply the cost of the dress by 0.08 to find the tax and then add it to the cost of the dress. Esther thinks that the cost of the dress should be multiplied by 1.08. The expressions for the two methods are shown below.

Martha:  $p + 0.08p$  Esther:  $1.08p$

Part A: Are the two expressions equivalent? Explain.

Part B: What does this mean in terms of the methods outlined by Martha and Esther?

13. Which inequality is shown on the graph?



- A.  $x \geq 8$
- B.  $x \leq 8$
- C.  $x > 8$
- D.  $x < 8$

14. Monique's son just turned 2 year old and is 34 inches tall. Monique heard that the average boy will grow approximately  $\frac{2}{8}$  inches per year until the age of 15.

7.EE.3

*RS*

Part A: Write an equation that represents how old Monique's son will be when he is 50 inches tall. (let  $x$  represent the amount of growth per year since age 2)

Part B: How old will Monique's son be when he is 50 inches tall?

15. What is the value of  $n$  in the equation  $4n + 4 = -32$ ?

7.EE.3

- A. -9
- B. -7
- C. 7
- D. 9

16. Which of these shows the following expressions in simplest form?

7.EE.2

$$7x + 1 + 5x + 5$$

- A.  $12x + 6$
- B.  $3x + 10$
- C. 13
- D.  $13x$

17. Eight minus 5 times a number is 9. Which of the equations can be used to find the number?

7.EE.4a

- A.  $8 - 5n = 9$
- B.  $9 - 5n = 8$
- C.  $5n - 8 = 9$
- D.  $8 + 5n = 9$

18. Which description is a correct way to solve the equation below?

7.EE.4a

$$\frac{d}{-3} + 8.2 = 6.4$$

- A. Subtract 8.2 from both sides, then divide both sides by -3
- B. Add 8.2 to both sides, then multiply both sides by -3
- C. Subtract 8.2 from both sides, then multiply both sides by -3
- D. Add 8.2 to both sides, then divide both sides by -3

19.

7.EE.4b

$$16 \leq \frac{w}{-4}$$

a.  $w \leq -4$ ;

c.  $w \geq 64$ ;



b.  $w \geq -64$ ;

d.  $w \leq -64$ ;



20.

$-2p > -16$

a.  $p < 8$ ;



b.  $p > 8$ ;



c.  $p < 32$ ;



d.  $p > 32$ ;



21.

$5(g+5) \leq 15$

a.  $g \geq -2$ ;



b.  $g \leq -2$ ;



c.  $g \leq 2$ ;



d.  $g \geq 2$ ;



22.

~~$-6 - 5g \leq -56$~~

a.  $g \leq 10$ ;



b.  $g \geq 10$ ;



c.  $g \leq 250$ ;



d.  $g \geq 250$ ;



23.

The product of 9 and a number is greater than 63.

a.  $9x < 63$ ;  $x < 7$

b.  $9x \leq 63$ ;  $x \leq 7$

c.  $9x \geq 63$ ;  $x \geq 7$

d.  $9x > 63$ ;  $x > 7$

24. Michael paid a total of \$48 for 4 pizzas. He used a coupon for \$4 off the entire order. The equation below can be used to determine the regular price of 1 pizza, p.

$$4p - 4 = 48$$

What is the regular price of 1 pizza?

A. \$11

B. \$12

C. \$13

D. \$16

25. Filomena had at most 60 minutes in which to complete her exam. If  $m$  represents the number of minutes, which inequality best describes this situation?

7.EE.4b

- A.  $m > 60$
- B.  $m \geq 60$
- C.  $m < 60$
- D.  $m \leq 60$

26. Soyeon determined that she had  $m \leq 45$  minutes left to practice her piano playing. Which of the following describes Soyeon's situation?

7.EE.4b

- A. She has at least 45 minutes left.
- B. She has less than 45 minutes left.
- C. She has at most 45 minutes left.
- D. She has over 45 minutes left.

27. The price,  $c$ , in dollars, of a winter coat that Jamal wants to buy has been discounted 20%. The expression below can be used to find the discounted price, in dollars, of the coat.

7.EE.2

$$1c - 0.20c$$

Which of the following expressions shows another way to determine the discounted price, in dollars, of the coat?

- A.  $0.80c$
- B.  $1.20c$
- C.  $80c$
- D.  $120c$



28. Which of the following sets of steps could be used to completely solve the equation below?

7. EE.4a

$$3x + 9 = 15$$

- A. add 9 to each side, and then multiply each side by 3
- B. subtract 9 from each side, and then divide each side by 3
- C. multiply each side by 3, and then add 9 to each side
- D. divide each side by 3, and then subtract 9 from each side

29. Which of the following expressions is equivalent to  $3(x+2) + 4y + 9x - 5$  ?

7. EE.2

- A.  $12x + 12y - 4$
- B.  $10x + 4y$
- C.  $12x + 4y + 1$
- D.  $12x + 4y - 1$

30. Which of the following demonstrates the Distributive Property?

7. EE.1

- A.  $2(3 - a) = 6 - 2a$
- B.  $-3(a \times b) = \frac{-3a}{b}$
- C.  $-2(a-3)=-2a - 3$
- D.  $c + a + c = a + (c + a)$

31. Which values of  $z$  make the inequality  $3z - 1 \leq -7$  true?

7.EE.4b

A.  $z \leq \frac{8}{3}$

B.  $z \geq \frac{8}{3}$

C.  $z \leq -2$

D.  $z \geq -2$

32. What are all possible values of  $x$  when  $4 + \frac{x}{2} \geq -10$  ?

7.EE.4b

A.  $x \leq -8$

B.  $x \geq -8$

C.  $x \geq -28$

D.  $x \leq -28$

33. Which expression are equivalent to  $12x - 6$ ?

7.EE.2

Mark all that apply.

A.  $-6(2x - 1)$

B.  $6(2x - 1)$

C.  $6x(2 - 1)$

D.  $-6x(2x - 1)$

E.  $-6(-2x + 1)$

F.  $6(-2x + 1)$

34. Which expression below is equivalent to  $-3x + 5(x + 2)$ ?

- A.  $2x + 2$
- B.  $-x + 2$
- C.  $2x + 10$
- D.  $-8x + 10$

7.EE.2

35. Simplify  $2.5x + 0.1x - 0.01x$

- A.  $2.39x$
- B.  $2.41x$
- C.  $2.59x$
- D.  $2.61x$

7.EE.2

36. The solution of the equation  $4x - 2 = 17$  is

- A. 4.25
- B. 4.75
- C. 5.25
- D. 5.75

7.EE.4a

37. The solution of the equation  $4(x - 2) = 17$  is

- A. 5.25
- B. 5.75
- C. 6.25
- D. 6.75

7.EE.4a

7.EE.4a

38. The solution of the equation  $-1 = \frac{n-4}{8}$  is
- A.  $n = 4$
  - B.  $n = -7$
  - C.  $n = -3$
  - D.  $n = -4$
39. The solution of the equation  $3 = \frac{x}{10} + 2$  is
- A. 5
  - B. 8
  - C. 10
  - D. -10

7.EE.4a

40. Factor:  $4m + 2n - 12$
- A.  $m(4 + 2n - 12)$
  - B.  $12(m + 2n)$
  - C.  $4(m + 2n - 3)$
  - D.  $2(2m + n - 6)$

7.EE.2

41. Simplify:  $(7x - 5) - (3x - 5)$
- A.  $4x$
  - B.  $4x - 10$
  - C.  $4x^2$
  - D.  $4x^2 - 10$

7.EE.2

Directions: Answer the following question(s).

- 1 The prices for different types and amounts of building bricks are given. Select the options that have the same cost per brick.
- A. 1500 bricks for \$1,110.00
  - B. 1300 bricks for \$845.00
  - C. 230 bricks for \$170.20
  - D. 100 bricks for \$75.00
  - E. 35 bricks for \$25.90

- 2 During a thunderstorm, 4 inches of rain fell in  $2\frac{1}{2}$  hours. What was the rate of rainfall in inches per hour?
- \_\_\_\_\_

- 3 Gabby has five bags of beads. Each bag has the same proportion of blue beads (x) to red beads (y). The table shows the numbers of beads in the five bags.

Numbers of Beads	
Blue (x)	Red (y)
32	48
48	72
60	90
80	120
100	150

What is the constant of proportionality of red beads to blue beads? Record the answer as a decimal number to the nearest tenth.

\_\_\_\_\_

- 4 Shana bought 8 apples for \$4 during a sale at her neighborhood market. Which proportion can be used to calculate the expected cost of 12 apples?
- A.  $\frac{\$4}{8} = \frac{d}{12}$
  - B.  $\frac{\$4}{12} = \frac{8}{d}$
  - C.  $\frac{8}{d} = \frac{12}{\$4}$
  - D.  $\frac{d}{12} = \frac{8}{\$4}$

Directions: Answer the following question(s).

- 5 The distance a train travels is proportional to time. In 4 hours, the train travels 380 kilometers. The relationship between distance and time can be represented as  $y = kx$ , where  $x$  is the time, in hours, and  $y$  is the distance, in kilometers. What is the value of  $k$  for this train?
- \_\_\_\_\_

- 6 When the store had a sale on strawberries, Lamont bought 3 packs for \$5.01. The next week the strawberries were still on sale so Lamont bought 2 more packs for \$3.34. What was the sale price of a single pack of strawberries?
- \_\_\_\_\_

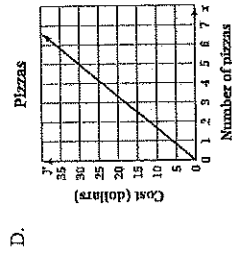
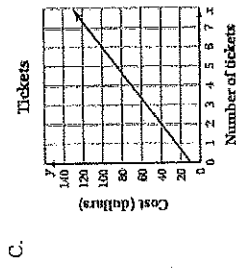
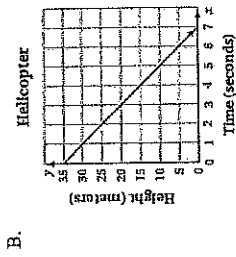
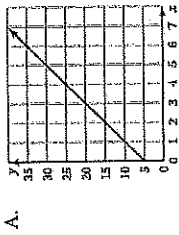
- 7 Since 1992, the United States Food and Drug Administration has required food labels to include nutrition facts. Tracy noticed that the serving size for a boxed meal is 1.5 cups, and each serving contains 148 milligrams of sodium. Tracy used the entire box to make 6 cups of food. How many milligrams of sodium are in the meal Tracy prepared?
- \_\_\_\_\_

- 8 On a sunny day, Eden and Jane noticed that their shadows were of different lengths. Jane measured Eden's shadow and found that it was 8 feet long. Eden then measured Jane's shadow and found that it was 8.5 feet long. If Eden is  $5\frac{1}{3}$  feet tall, how many feet tall is Jane? Express your answer as an improper fraction.
- \_\_\_\_\_

- 9 Victory Theater offers matinee tickets that are 35% cheaper than the tickets for the evening shows. If an evening ticket costs \$8.00, how many dollars does a matinee ticket cost?
- \_\_\_\_\_

- 10 In a vegetable market, all cantaloupes are on sale for 70% off the original price. If a single cantaloupe has an original price of \$2.60, how many dollars is the sale price?
- \_\_\_\_\_

11 Which graph shows  $x$  and  $y$  in a proportional relationship?



12 TRAVEL What is the unit rate of traveling 372 miles in 6 hours? (1 pt.)

- A. 6.2 mph
- B. 55 mph
- C. 60 mph
- D. 62 mph

13 Which of the following graphs represents a proportional relationship? (1 pt.)

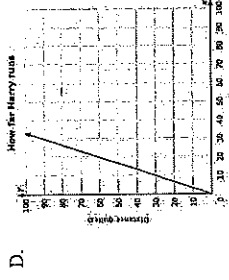
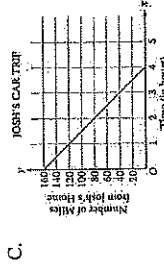
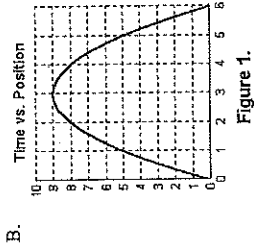
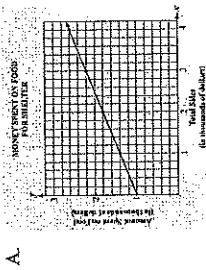


Figure 1.

14 The table below shows the cost of movie tickets based on the number of tickets purchased.

Number of Tickets	Cost
2	\$17.00
3	\$25.50
4	\$34.00
5	\$42.50

Find the constant of proportionality ( $r$ ). Using the value for  $r$ , enter an equation that will calculate the cost ( $y$ ) of  $x$  movie tickets in the form of  $y = rx$ . (4 pt.)

A.  $y = 8.5x$   
 B.  $y = 17x$   
 C.  $y = 9.5x$   
 D.  $y = 5.5x$

15 The coach for a basketball team wants to buy new shoes for her 12 players.

Super Sports is offering a 20% discount on each pair of shoes, which were originally priced at \$72.50. A 6.5% sales tax will be applied to the discounted price.

The same shoes are also available on Double Dribble's web site for \$54.75. A 9% processing fee will be applied to the cost of the shoes, plus a shipping fee of \$5.99 for each pair.

What is the difference in the total costs of the 12 pairs of shoes between the two stores? Show your work clearly.

16 Edith is shopping for a new leather couch. Jordan's Furniture has one that costs \$3,000. However, this weekend she can get a 15% discount. How much money will Edith save if she buys the couch this weekend?

- A. \$15  
 B. \$2,550  
 C. \$45,000  
 D. \$450

17 Caroline wants to buy a pair of shoes that has an original price of \$50.00. She has a coupon for a 40% discount off of the original price. What is the final cost for Caroline's shoes?

- A. \$10  
 B. \$20  
 C. \$30  
 D. \$48

18 Kelly sold digital cameras on her web site. She bought the cameras for \$56 each and included a 65% markup to get the selling price. To the nearest dollar, what was the selling price for one camera?

Show your work.

19 Mya sold iPods on her web site. She bought the iPods for \$78 each and included a 45% markup to get the selling price. To the nearest dollar, what was the selling price for iPod?

Show your work.

20 Dinner cost \$12.00 plus a 20% tip. What was the total cost of lunch?

21 If Paul answers 6 questions out of 15 test questions correctly, what percent of his test questions did he answer correctly?

- A. 7%
- B. 35%
- C. 40%
- D. 60%

22 The table below shows the amount of money Allen earns for tutoring based on the number of hours he tutors.

Hours	Earnings
2	\$30
3	\$45
4	\$60

Find the constant of proportionality ( $r$ ). Using the value of  $r$ , enter an equation that will calculate the amount Allen earns ( $y$ ) after tutoring  $x$  hours in  $y=rx$ .

- A.  $y = 2x$
- B.  $y = 30x$
- C.  $y = 15x$

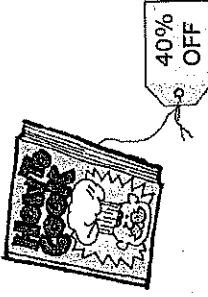
23 What is the unit rate of \$2.50 for 10 pens?

- A. \$0.10 per pen
- B. \$0.25 per pen
- C. \$0.40 per pen

24 Caroline wants to buy a pair of shoes that has an original price of \$50.00. She has a coupon for a 40% discount off of the original price. Her state charges an 8% sales tax on the discounted price. What is the final cost for Caroline's shoes?

- A. \$28.40
- B. \$32.40

25 A cookbook originally cost \$13.00. Yesterday, Marta bought it at 40% off.



How much was deducted from the original price?

- A. \$0.40
- B. \$5.20

26 Dave buys a baseball for \$15 plus an 8% tax. Mel buys a football for \$20 plus an 8% tax. Enter the difference in the amount Dave and Mel paid, including tax. Round your answer to the nearest cent.

27 If 2.5 pounds of onions cost \$4.00, how much would 1 pound of onions cost?

28 The Rodriguez family ate at a restaurant.

- The cost of the meal was \$45.67.
- The sales tax was 8%.
- They left a tip of 15% of the cost of the meal and the tax.

What was the total cost of the meal, tax, and tip combined?

- A. 49.82
- B. 45.9
- C. 56.72
- D. 56.17



Directions: Answer the following question(s).

- 29 A video game is on sale for 45% off the regular price. If the original price was \$60, how much is the sale price?
- 30 You loan your brother \$75 at 9% annual simple interest. He pays you back in 2 years. How much money will he pay you?
- 31 A savings account pays 4 1/2% interest. How much interest will be earned on \$450 in 3 years? How much will be in the account in 3 years?  
A. \$75.89; \$525.75  
B. \$60.75; \$510.75  
C. \$66.80; \$799  
D. \$34.09; \$548.09
- 32 Juan fills up his truck with gas. He paid \$3.05 per gallon. If he buys 9 gallons, how much will he pay?
- 33 Which of the following equations represent a proportional relationship? Select two that apply.  
A.  $\frac{3}{6} = \frac{6}{3}$   
B.  $\frac{4}{6} = \frac{10}{15}$   
C.  $\frac{5}{5} = \frac{11}{11}$   
D.  $\frac{8}{15} = \frac{4}{30}$
- 34 José put \$1,500 into a savings account. He earns 3% interest every year. How much simple interest will he earn at the end of 3 years?  
A. \$45.00  
B. \$135.00  
C. \$13,500.00
- 35 Luke buys a TV that is on sale for 25% off the original price. The original price is \$120 more than the sale price. What is the original price of the TV?