حل مراجعة أسئلة وفق الهيكل الوزاري ريفيل

تاريخ نشر الملف على موقع المناهج: 2024-03-04 06:24:11 | اسم المدرس: Eyad Mousa

التواصل الاجتماعي بحسب الصف السادس

روابط مواد الصف السادس على تلغرام

الرياضيات	اللغة الانجليزية	اللغة العربية	التربية الاسلامية

المزيد من الملفات بحسب الصف السادس والمادة رياضيات في الفصل الثاني

أسئلة هيكل الرياضيات الصف السادس /ريفيل الفصل الثاني عام 2023/2024

Multiple Choice Questions (MCQ

Page 267 Exercise: 1 - 6

1. **Write the product of 4 × 4 × 4 using an exponent.**

   A. 3^4 B. 4^3 C. 4 x 3   D. 64   b

2. **Write the product of 3 × 3 × 3 × 3 × 3 using an exponent.**

   A. 3^5 B. 5^3 C. 3 x 5   D. 343

3. **Write the product of 15 × 15 × 15 × 15 using an exponent.**

   A. 15^4 B. 15^3 C. 4 x 15   D. 50625

4. **Write the product of $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ using an exponent.**

   A. $\frac{3^6}{4}$ B. $\frac{3}{4^6}$ C. $\left(\frac{4}{3}\right)^6$ D. $\left(\frac{3}{4}\right)^6$

5. **Write the product of $\frac{1}{3} \times \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3}$ using an exponent.**

   A. $\frac{1^7}{3}$ B. $\frac{1}{7^3}$ C. $\left(\frac{1}{3}\right)^7$ D. $\frac{1}{2187}$

6. **Write the product of 1.625 x 1.625 using an exponent.**

   A. $(1.652)^2$ B. $(625.1)^2$ C. $\frac{1625}{1000}$ D. $\left(\frac{1625}{1000}\right)^2$

1. Evaluate the expression $64 \div (15 - 7) \times 2 - 9$

    A. -7   B. 5   C. 14   D. 7

2. Evaluate the expression $9 + 8 \times 3 - (5 \times 2)$

    A. 41   B. 23   C. 33   D. 28

3. Evaluate the expression $4 \times (15^2 - 12) - 6$

    A. 46   B. 41   C. 2   D. 22

4. Evaluate the expression $78 - 2^4 \div (14 - 6) \times 2$

    B. 125   B. 70   C. 74   D. 35

5. Evaluate the expression $9 + 7 \times (15 + 3) \div 3^2$

    A. 15   B. 23   C. 32   D. 74

6. Evaluate the expression $13 + (4^3 \div 2) \times 5 - 17$

    A. 23   B. 143   C. 660   D. 156

7. Evaluate the expression $4 + \left(6^2 \div \frac{1}{4}\right) \times 3$

    A. 288   B. 146   C. 436   D. 31

8. Evaluate the expression $12 + \left(2^3 \div \frac{2}{3}\right) - 2$

    A. - 22   B. - 20   C. 22   D. 20

9. Evaluate the expression $36 \div \left(3^2 \div \frac{3}{4}\right) - 2.4$

    A. $\frac{4}{5}$ B. $\frac{5}{3}$ C. 6.0   D. 0.6

10. Evaluate the expression $80 \div \left(4^2 \div \frac{2}{5}\right) + 3.75$

    A. 16.6   B. 5.75   C. 1.82   D. 0.6

* Identify the terms, like terms , coefficients , and constants in each expression .

1. 4e + 7e + 5 + 2e	2. 5a + 2 + 7 + 6a	3. 4 + 4y + y + 3
Terms:..4e , 7e ,5 and 2e ..	Terms:.......5a , 6a and 2 , 7	Terms:.......4 , 4y , y and 3
like terms:4e ,.7e.and.2e..	like terms:...5a , 6a , and 2 , 7	like terms:.......4y , y and 4 , 3
Coefficients:......... 4 , 7 , 2...	Coefficients:...5 , 6...............	Coefficients:........4 , 1......
Constants:.........5..............	constants:.....2 and 7..........	constants:..4 and 3.........

1. Evaluate the expression $8x$ if $x = \frac{3}{4}$

A. 32 B. 24 C. 6 D. $\frac{24}{10}$

2. Evaluate the expression y^2 if $y = 2.5$

A. 0.625 B. 6.25 C. 2.5 D. 62.5

3. Evaluate the expression $\frac{10}{y}$ if $y = 2.5$

A. 4 B. 25 C. 100 D. $\frac{10}{2.5}$

4. Evaluate the expression $a + b$ if $a = \frac{2}{3}$ and $b = \frac{4}{5}$

A. $\frac{22}{15}$ B. $1\frac{7}{15}$ C. $\frac{6}{18}$ D. $\frac{3}{4}$

5. Evaluate the expression $c - b$ if $b = \frac{4}{5}$ and $c = 6$

A. $5\frac{1}{5}$ B. $5\frac{2}{5}$ C. $\frac{26}{5}$ D. 2.5

6. Evaluate the expression $b - a$ when $a = \frac{2}{3}$ and $b = \frac{4}{5}$

A. $\frac{1}{15}$ B. $\frac{2}{15}$ C. $\frac{12}{15}$ D. 4.0

7. Evaluate the expression $(3a + 18c) \div b^2$ when $a = 4$, $b = 3$ and $c = \frac{1}{3}$

    $a.\ 7$ B. 11   C. 2   D. 3

8. Evaluate the expression $(a^2 + 12c) \div (7b - 1)$ when $a = 4$, $b = 3$ and $c = \frac{1}{3}$

    $a.\ 1$ B. 0.6   C. 2   D. 3

9. Evaluate the expression $(2b + 3a)(c^2)$ when $a = 4$, $b = 3$ and $c = \frac{1}{3}$

    $a.\ 1$ B. 2.2   C.3   D. 2

Page 303 Exercise: 1 - 6

1. Find the GCF (Greatest Common Factor) of 12 and 30.

    A. 2   B. 3   C. 6   D. 60

2. What is the Greatest Common Factor of 4 and 16.

    A. 16   B. 32   C. 8   D. 4

3. What is the Greatest Common Factor of 9 and 36.

    A. 3   B. 9   C. 12   D. 18

4. Find the GCF (Greatest Common Factor) of 35 and 63.

    A. 7   B. 14   C. 5   D. 1

5. What is the GCF (Greatest Common Factor) of 42 and 56.

    A. 112   B. 14   C. 84   D. 7

6. What is the GCF (Greatest Common Factor) of 54 and 81.

    A. 9   B. 27   C. 3   D. 162

7. On every fourth visit to the hair salon, Margot receives a discount of $5. On every tenth visit, she receives a free hair product. After how many visits will Margot receive the discount and a free product at the same time ?
   a. 15 visits   B. 20 visits   C. 10 visits   D. 11 visits

8. The table shows the city bus schedule for certain bus lines. Both buses are at the bus stop right now. In how many minutes will both buses be at the bus stop again?

   a.   50 minutes
   b.   100 minutes
   C. 25 minutes
   D. 75 minutes

Bus Line	Arrives at the bus stop every...
A	25 minutes
B	15 minutes

9. Find the least common multiple of pair of numbers 4 , 9
   a. 6   B. 2   C. 12   D. 18

10. Find the least common multiple of pair of numbers 3 , 5
   a.   10   B. 5   C. 20   D. 15

1. Use the Distributive Property to expand the expression $3 (x + 8)$

   A. $3x + 8$ B. $3x + 38$ C. $3x + 24$ D. $8x + 3$

2. Use the Distributive Property to expand the expression $5 (6 + x)$

   A. $30x + 5$ B. $5x + 30$ C. $30 + 5$ D. $x + 30$

3. Use the Distributive Property to expand the expression $9 (3 + x)$

   A. $27 + 9x$ B. $93 + 9x$ C. $27 + 3x$ D. $27x + 3$

4. Use the Distributive Property to simplify the expression $12 \bullet 3\frac{3}{4}$

   A. 27   B. 25   C. 45   D. 40

5. Use the Distributive Property to simplify the expression $15 \cdot 2\frac{2}{3}$

    A. 45   B. 40   C. 30   D. 20

6. Use the Distributive Property to simplify the expression $8 \cdot 4\frac{1}{2}$

    A. 37   B. 16   C. 36   D. 20

7. Use the GCF and the Distributive Property to express the sum 16 + 48

    A. $2(8+24)$ B. $16(1+3)$ C. $4(4+12)$ D. $8(2+6)$

8. Use the GCF and the Distributive Property to express the sum 35 + 63

    A. $9(4+7)$ B. $5(7+13)$ C. $7(5+9)$ D. $3(5+6)$

9. Use the GCF and the Distributive Property to express the sum 26 + 39

    A. $13(2+3)$ B. $2(13+18)$ C. $13(2+4)$ D. $3(8+13)$

10. Use the GCF and the Distributive Property to express the sum 8 x + 16

    A. $2(4x+8)$ B. $4(4x+2)$ C. $8(2x+1)$ D. $8(x+2)$

11. Use the GCF and the Distributive Property to express the sum 24 + 6 x

    A. $6(4x+1)$ B. $6(4+x)$ C. $3(3x+12)$ D. $2(3x+8)$

12. Use the GCF and the Distributive Property to express the sum 42 + 7 x

    A. $7(6x+1)$ B. $7(6+x)$ C. $6(1x+7)$ D. $6(7x+21)$

Use properties of operations to determine whether or not the expressions are equivalent.(Example 1)

1. $(x + 10) + x + 9$ and $2(x + 7) + 5$

- Equivalent
- Not Equivalent

2. $0.5x + 1$ and $1(0.5x)$

- Equivalent
- Not Equivalent

Use substitution to determine whether or not the expressions are equivalent. (Examples 2 and 3)

3. $3x + 2x + x$ and $7x$

- Equivalent
- Not Equivalent

4. $x^2 + 1$ and $\frac{2}{3}x^2 + \frac{1}{3}x^2 + 1 + x$

- Equivalent
- Not Equivalent

Simplify each expression. (Examples 4 and 5)

5. $3x + 4 + 5x - 1$

a. $15x - 3$
b. $8x + 3$
c. $8x - 3$
d. $12x - 1$

6. $10 + 7x - 5 + 4x$

a. $17x + 9$
b. $3x + 5$
c. $11x + 5$
d. $11x - 5$

7. $4x^2 + 6x + 8 + x + 2$

a. $4x^2 + 7x + 10$
b. $4x^2 + 6x + 10$
c. $10x^2 + x + 10$

8. $\frac{1}{2}x^2 + x + \frac{1}{2} + 2x + \frac{1}{2}x^2$

a. $1\frac{1}{2}x^2 + 3x$ b. $\frac{1}{4}x^2 + 2x + \frac{1}{2}$ c. $x^2 + 3x + \frac{1}{2}$

9. Simplify $\frac{3}{4} + \frac{2}{3}(9x + 6) + 4x + 3\frac{1}{4}$. (Example 6)

a. $13x + \frac{17}{12}$
b. $10x + 4\frac{16}{4}$
c. $10x + 8$
d. $13x - 1\frac{5}{12}$

10. Multiselect Which of the following are equivalent to $\frac{3}{4}(8x^2 + 1) + 3x^2 + \frac{1}{4}$? Select all that apply.

- 🔴 $6x^2 + \frac{3}{4} + 3x^2 + \frac{1}{4}$
- ☐ $6x^2 + 1 + 3x^2 + \frac{1}{4}$
- ☐ $9x^2 + 1\frac{1}{4}$
- 🔴 $9x^2 + \frac{3}{4} + \frac{1}{4}$
- ☐ $9x^2 + 2$
- 🔴 $9x^2 + 1$

7

5. Identify which of the solution satisfy the equation : $4.5x = 18$

    A. 4   B. 3   C. 5   D. 2

6.   What the value of c in the following equation : $4.25c = 27$

    A. 13   B. 12   C. 14   D. 15

7. What the value of d in the following equation : $d \div 5.5 = 4$

    A. 20   B. 21   C. 22   D. 23

8. What the value of y in the following equation : $36.3 \div y = 12.1$

    A. 2   B. 3   C. 4   D. 5

5. Solve the equation   9 = 3 + a

    A. 3   B. 12   C. 6   D. 27

6. Solve the equation   5 + x = 10

    A. 5   B. 15   C. 2   D. 50

7. Solve the equation $3\frac{1}{4} + z = 6\frac{3}{4}$

    A. 10   B. $9\frac{1}{4}$ C. $3\frac{1}{4}$ D. $3\frac{1}{2}$

8. Solve the equation $9\frac{1}{2} = b + 2\frac{1}{4}$

    A. $11\frac{3}{4}$ B. $11\frac{1}{4}$ C. $7\frac{1}{4}$ D. $7\frac{1}{2}$

9. Solve the equation   18.35 = c + 5.1

    A. 23.45   B. 13.25   C. 22.45   D. 13.45

10. Solve the equation   x + 5.15 = 23.85

    A. 29   B. 4.63   C. 18.7   D. 18.8

5. What the value of x in the following equation : $24 = x - 5$

A. - 29   B. -19   C. 29   D. 19

6. Solve the following equation. $z - 7 = 19$

A. - 12   B. - 26   C. 12   D. 26

7. Solve the following equation $z - 9\frac{1}{3} = 1\frac{5}{9}$

A. $-10\frac{8}{9}$ B. $10\frac{8}{9}$ C. $-10\frac{6}{12}$ D. $10\frac{6}{12}$

8. Solve the following equation. $5\frac{1}{2} = b - 12\frac{1}{4}$

A. $17\frac{3}{4}$ B. $-17\frac{3}{4}$ C. $17\frac{6}{8}$ D. $7\frac{3}{4}$

9. Solve the following equation $67.9 = c - 4.45$

A. -72.35 B. -63.45 C. 72.35   D. 63.45

10. Solve the following equation $x - 7.49 = 87.3$

A. -94.79 B. 94.79   C. 79.81 D. -79.52

11. After spending money for a golf outing, Gus had $517.92 remaining in his checking account. The table shows how much money he spent on different items for the outing. Use an equation to find how much money Gus originally had in his checking account.

A. $x + 150 = 517.92$
B. $517.92 - 150 = x$
C. X – 150 = 517.92
D. X $-$ 138.75 = 517.92

Item	Cost ($)
Outing Fee	94.50
Golf Shoes	44.25
Gloves	11.25

X = ……667.92……..

9

12. Robin made two batches of every item shown in the table. At the end of the day, she had $1\frac{1}{4}$ cups of flour left. Use an equation to find how much flour Robin originally had on Saturday.

A. $x - 5\frac{1}{4} = 1\frac{1}{4}$

B. $x + 5\frac{1}{4} = 1\frac{1}{4}$

C. $x - 4\frac{1}{4} = 1\frac{1}{4}$

D. $x - 1\frac{1}{4} = 5\frac{1}{4}$

Baking Item	Amount of Flour
Bread	$1\frac{3}{4}$ cups
Muffins	2 cups
Pancakes	$1\frac{1}{2}$ cups

X = ……$6\frac{1}{2}$………

13. During a test flight, Jeri's rocket reached a height of 18 yards above the ground. This was 7 yards less than the height that Devon's rocket reached. Did Devon's rocket reach a height greater than 23 yards ?

A. $D - 7 = 25$ (D = 18)
   No , Devon's rocket not reach a height greater than 23 yards.

B. $D - 7 = 18$ (D = 25)
   Yes , Devon's rocket reach a height greater than 23 yards.

C. $18 - 7 = D$ (D = 11)
   No , Devon's rocket not reach a height greater than 23 yards.

D. $D + 18 = 7$ (D = 25)
   Yes , Devon's rocket reach a height greater than 23 yards.

14. A student is solving the equation x – 3.2 = 5.5 . Find the student's mistake and correct it .

$$x - 3.2 = \quad 5.5$$
$$\underline{- 3.2 \quad -3.2}$$
$$x \qquad = \quad 2.3$$

$x - 3.2 = \quad 5.5$	$x - 3.2 = \quad 5.5$	$x - 3.2 = \quad 5.5$	$x - 3.2 = \quad 5.5$
$+ 3.2 \quad +3.2$	$+3.2 \quad +3.2$	$+ 3.2 \quad -3.2$	$- 3.2 \quad +3.2$
$x \qquad = \quad 2.3$	$x \qquad = \quad 8.7$	$x \qquad = \quad 2.3$	$x \qquad = \quad 8.7$

1. **Maribel and some friends went to an adventure park. The total cost of their tickets was $374 and each person paid $46.75.Write a multiplication equation that can be used to find how many people bought tickets to the adventure park.**

   A. 46.75 = 374p

   B. 46.75p = 374

   C. 340 (46.75) = p

   D. 46.75 ÷ p = 360

2. **It takes Samuel $\frac{1}{5}$ hour to walk a mile. Yesterday, Samuel walked for $1\frac{1}{2}$ hours .Write a multiplication equation that can be used to find the number of miles Samuel walked.**

   A. $1\frac{1}{2}m = \frac{1}{5}$

   B. $\frac{1}{2}m = \frac{1}{5}$

   C. $\frac{1}{5}m = 1\frac{1}{2}$

   D. $1\frac{1}{2}m = \frac{1}{5}$

3. **The distance around a lake is 2.6 miles. On Saturday, Doug biked a total of 18.2 miles around the lake. Write a multiplication equation that can be used to find how many times Doug biked around the lake.**

   A. 2.6 = 18.2t

   B. 2.6 ÷ t = 18.2

   C. 2.6 (18.2) = t

   D. 2.6t = 18.2

4. **An express delivery company charges $3.25 per pound to mail a package. Georgia paid $9.75 to mail a package. Write a multiplication equation that can be used to find the weight of the package in pounds.**

   A. 9.75 p = 3.25

   B. 3.25p = 9.75

   C. 3.25 × 9.75 = p

   D. (9.75) p = 3.25

7. Which of the following are solutions of the inequality : $t + 7 \leq 12$

    A. 10   B. 6   C. 5   D. 7

8. What the value of h in the following inequality : $h - 4 > 9$

    a. 13   B. 12   C. -90 D. 14

9. Which of the following are solutions of the inequality : $8r \geq 1.8$

    a. $\frac{1}{5}$ B. $\frac{1}{8}$ C. $\frac{1}{4}$ D. $\frac{1}{6}$

10. Which are the solutions of the inequality: $\frac{2.4}{n} > 6$

    A. 0.25   B. 0.4   C. 0.5   D. 0.6

1. **A school sells tickets to their school play through an online ticket company . Each ticket costs $8 and the company charges a $2.50 processing fee per order. Represent the relationship between the number of tickets bough t and the total cost c with an equation, a table, and a graph.**

- **Represent the relationship with an equation and a table**

c = 2.5t + 8	c = 8t - 2.50	c = 8t + 2.50

c = 2.5t + 8

Number of Tickets, t	Total Cost ($), c
1	10.50
2	13
3	15.50
4	18

c = 8t - 2.50

Number of Tickets, t	Total Cost ($), c
1	5.50
2	13.50
3	21.50
4	29.50

c = 8t + 2.50

Number of Tickets, t	Total Cost ($), c
1	10.50
2	18.50
3	26.50
4	34.50

- **Represent the relationship with a graph.**

13
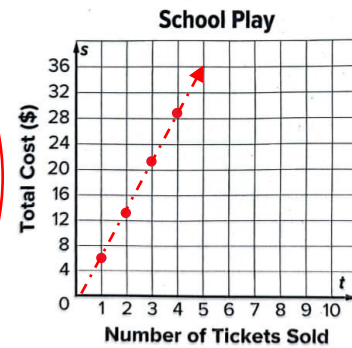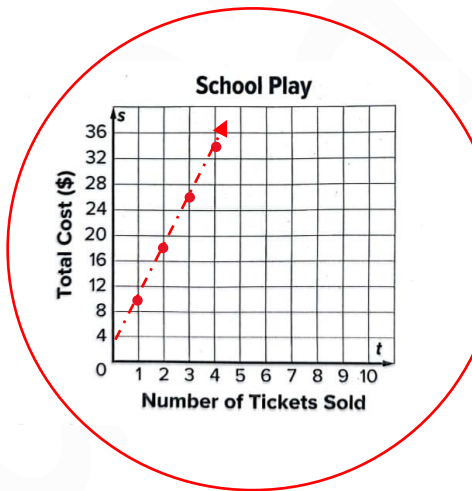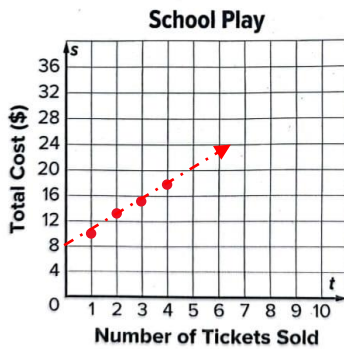
2. **Carmelo earns a weekly allowance of $5 plus an additional $0.75 for each chore that he completes. Represent the relationship between the total earned t and the number of chores completed c with an equation, a table, and a graph.**

- **Represent the relationship with an equation and a table**

$t = 0.75c + 5$		$t = 5c + 0.75$		$t = 5 - 0.75c$	
Number of Chores, c	Total Earned ($), t	Number of Chores, c	Total Earned ($), t	Number of Chores, c	Total Earned ($), t
1	5.75	1	5.75	1	4.25
2	6.50	2	10.75	2	3.5
3	7.25	3	15.75	3	2.75
4	8.00	4	20.75	4	2

- **Represent the relationship with a graph.**

Allowance
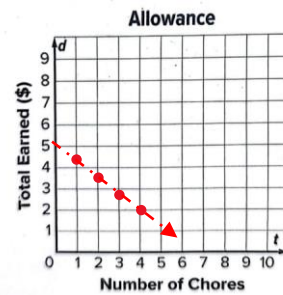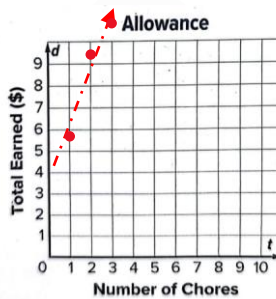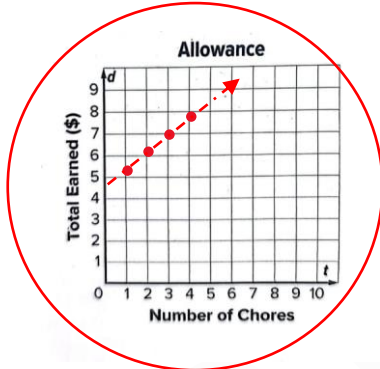
3. The **table shows the earnings for each pie sold at the sixth grade bake sale. Represent the relationship between the number of pies sold p and the total earnings e with an equation.**

A. $p = 6e$

B. $e = 6p$

C. $e = \dfrac{p}{6}$

D. $p = \dfrac{e}{6}$

Number of Pies, p	Total Earnings ($), e
1	6
2	12
3	18

14

4. **Zari is comparing the costs of having cupcakes delivered from two different bakeries. Betty's Bakery offers free delivery and sells cupcakes by the dozen. The table shows the total cost c of d dozens from Betty's Bakery. The Sweet Shope charges $20 for delivery and $18 per dozen. The equation c = 18d + 20 represents the total cost c of d dozens of cupcakes and delivery from the Sweet Shop. If Zari has $110 to spend, which bakery should she use to order the greatest number of cupcakes? Explain**

Number of Dozens of Cupcakes, d	Total Cost ($), c
1	24
2	48
3	72

A. The two bakeries are the same .

B. The Sweet Shoppe Bakery.

C. The Betty's Bakery.

D. No enough information

Explain :
The equation for betty's bakery shown from the table is (c = 24 d)
C = 24 d
110 = 24 d
d = 4.58

The equation for sweet shoppe is (c = 18d + 20)
C = 18 d + 20
110 = 18 d +20
110 – 20 = 18 d
90 = 18 d
d = 5

So Zari can order the greatest number of cupcakes from sweet shoppe.

5. **Ryder plays a video game where each player is given points and players earn more points by catching bugs. Write an equation to represent the total number of points p earned for catching b bugs. Use the equation to find Ryder's points after catching 10 bugs .**

a. P = 5 b + 2 .
   Ryder's points after catching 10 bugs are 52 points.

b. P = 10 b
   Ryder's points after catching 10 bugs are 20 points.

c. P = 5b + 5.
   Ryder's points after catching 10 bugs are 55 points.

d. P = 10 b + 2
   Ryder's points after catching 10 bugs are 102 points.

15

6. Winslow earns $15.50 for each lawn that he mows. Represent the relationship between number of lawns mowed m and his total earnings e with an equation.

a. m = 15.50 e .

b. e= 15.50 m

c. e + m = 15.50

d. e x m = 15.50

- choose the table that Represent the relationship for 0,1,2 and 3 lawns mowed.

Lown mowed ,m	0	1	2	3
Earnings $, e	15.50	31.00	46.50	62.00

Lown mowed ,m	0	1	2	3
Earnings $, e	0	15.50	31.00	46.50

Lown mowed ,m	0	1	2	3
Earnings $, e	0	15.50	7.75	5.16

Page 285 Example: 4 - 9

Write the phrase as an algebraic expression

  4. (Three more pancakes than Hector ate)

……… $h + 3$…………………………………………………………………………..

Write the phrase as an algebraic expression

  5.(Twelve fewer questions than were on first test)

……… $q - 12$………………………………………………………………………..

Write the phrase as an algebraic expression

  6.(Two and one-half times the number of minutes spent exercising)

……… $2.5m$…………………………………………………………………………..

Write the phrase as an algebraic expression

  7. (One–third the number of yards)

……… $\frac{1}{3}y$ …………………………………………………………………………..

Write the phrase as an algebraic expression

  8. (Four less than seven times Lynn's age)
……… $7\,a - 4$ …………………………………………………………………………..

Write the phrase as an algebraic expression

  9. ($2.50 more than one–fourth the cost of a pizza)

……… $\frac{1}{4}p + 2.50$…………………………………………………………………………..

5. Solve the following equation $6 = \dfrac{j}{8}$

…… $j = 48$ ……………………………………………………………

6. Solve the following equation $\dfrac{k}{7} = 7$

…… $k = 49$ ……………………………………………………

7. Solve the following equation $\dfrac{z}{4} = \dfrac{2}{3}$

…… $z = 2\dfrac{2}{3}$ ……………………………………………………

8. Solve the following equation $\dfrac{1}{2} = \dfrac{w}{8}$

…… $w = 4$ ………………………………………………………

9. Solve the following equation $5.31 = \dfrac{p}{9.2}$

…… $p = 48.852$ ……………………………………………………

10. Solve the following equation $\dfrac{x}{1.3} = 1.94$

……x $= 2.522$ ……………………………………………………

Page 389 Example: 1 - 6

1. The minimum deposit for a new checking account is $75 . Write an inequality to represent the amounts in dollars a that could be deposited in a new checking account.
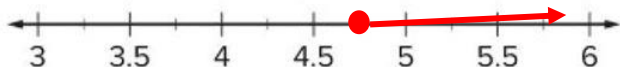……a ≥ 75 …………………………………………………………

2. To win a medal in a 5K race, a runner's time must be less than 22 minutes. Write an inequality to represent the times in minutes m that would win a medal.
…… m < 22 …………………………………………………………
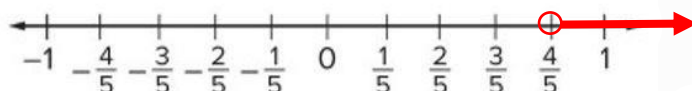
3. **Graph inequality on the number line** $b < -1.5$
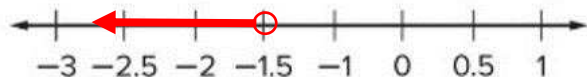
$$-3 \quad -2.5 \quad -2 \quad -1.5 \quad -1 \quad 0 \quad 0.5 \quad 1$$

4. **Graph inequality on the number line** $d \geq 4.75$

$$3 \quad 3.5 \quad 4 \quad 4.5 \quad 5 \quad 5.5 \quad 6$$

5. **Graph inequality on the number line** ty $a > \dfrac{4}{5}$

$$-1 \quad -\tfrac{4}{5} \quad -\tfrac{3}{5} \quad -\tfrac{2}{5} \quad -\tfrac{1}{5} \quad 0 \quad \tfrac{1}{5} \quad \tfrac{2}{5} \quad \tfrac{3}{5} \quad \tfrac{4}{5} \quad 1$$

6. **Graph inequality on the number line** $d \geq -2\dfrac{1}{2}$

$$-3 \quad -2\tfrac{1}{2} \quad -2 \quad -1\tfrac{1}{2} \quad -1 \quad -\tfrac{1}{2} \quad 0$$
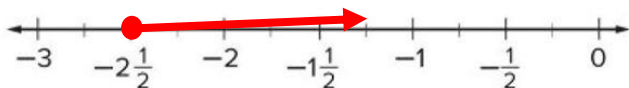
Page 403 Example: 1 - 6

1. **Sadie ordered a pizza and had it delivered. The delivery fee is $3.50. The total cost c is equal to the cost of her pizza p plus $3.50. The rule is p+3.50. Complete the table using the rule to find the total cost if her pizza costs $9.75, $12.00, or $14.50.**

Input, Cost of Pizza ($), p	Rule p + 3.50	Output, Total Cost ($), c
9.75	9.75 + 3.50	13.25
12.00	12.00 + 3.50	15.50
14.50	14.50 + 3.50	18

2. Joshua has a coupon for $1.50 off his purchase at the souvenir shop. The total cost C is equal to the cost of his purchase p minus $150. The rule is p - 150. Complete the table using the rule to find the total cost if his purchase is $567. $8 34, or $11.97 .

Input, Cost of Purchase ($), p	Rule p − 1.50	Output, Total Cost ($), c
5.67	5.67 − 1,50	4. 17
8.34	8.34 – 1.50	6.84
11.97	11.97 – 1.50	10.47

3. Miranda has a coupon for $0.75 off any salad at a restaurant. The total cost c is equal to the cost of her salad s minus $0.75. The rule is s 0.75. Complete the table using the rule to find the total cost if her salad costs $2.79. $3.55, or $4.25.

Input, Cost of Salad ($), s	Rule s − 0.75	Output, Total Cost ($), c
2.79	2.79 - 0.75	2.04
3.55	3.55 - 0.75	2.80
4.25	4.25 - 0.75	3.50

4. Avery is buying material by the yard to make bags. The material costs $4.98 per yard .The total cost C of y yards is equal to 4.98 times y. Complete the table to find the number of yards Avery purchased if the total cost is $14.94, $29.88, or $44.82.

Input, Number of Yards, y	Rule 4.98y	Output, Total Cost ($), c
3	4.98 x 3	14.94
6	4.98 x 6	29.88
9	4.98 x 9	44.82

5. Each pie at a bakery costs $9.50. The total cost c of p pies is equal to 9.50 times p. Complete the table to find the number of pies purchased if the total cost is $19.00. $28.50, or $47.50.

Input, Number of Pies, p	Rule 9.50p	Output, Total Cost ($), c
2	9.5 x 2	19.00
3	9.5 x 3	28.50
5	9.5 x 5	47.50

6. Anthony is buying plants for him garden. Each plant costs $0.95 The total cost c of p plants is equal to 0.95 times p . Complete the table to find the number of plants Anthony purchased if the total cost is $7.60 , $11.40 or $15.20

Input, Number of Plants, p	Rule 0.95p	Output, Total Cost ($), c
8	0.95 x 8	7.60
12	0.95 x 12	11.40
16	0.95 x 16	15.20

Page 413 Example: 1 - 5

1. The table shows the total cost c of buying t movie tickets. Write an equation to represent the relationship between c and t.

………$c = 7t$…………………………………………..

Number of Tickets, t	Total Cost ($), c
1	7
2	14
3	21
4	28

2. The table shows the total number of pencils p in b boxes. Write an equation to represent the relationship between p and b.

………$p = 12 b$…………………………………………………………

Number of Boxes, b	Total Number of Pencils, p
1	12
2	24
3	36
4	48

21

3. The table shows the total cost of bowling any number of games and renting bowling shoes. Write a two-step equation to represent the total cost for bowling games.

Number of Games, g	Total Cost ($), c
1	6
2	10
3	14
4	18

.........$c = 4\,g + 2$...

4. The table shows the total cost of renting a canoe based on the number of hours and a one-time rental fee. Write a two-step equation to represent the total cost c of renting a canoe for h hours.

Number of Hours, h	Total Cost ($), c
1	16
2	27
3	38
4	49

.........$c = 11h + 5$...

5. **Open Response** The table shows the total cost of belonging to a fitness center based on the number of months and a one-time registration fee. Write a two-step equation to represent the total cost c for belonging to the fitness center for m months.

Number of Months, m	Total Cost ($), c
1	25
2	40
3	55
4	70

.........$c = 15\,m + 10$...

1. **The equation p = 144b represents the number of pencils p in b boxes. Graph the relationship on the coordinate plane.**

Pencil Boxes

Number of Pencils

360
324
288
252
216
180
144
108
72
36

0 1 2 3 4 5 6 7 8 9 10

Number of Boxes
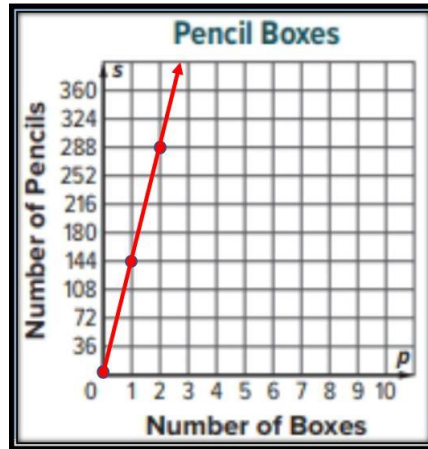
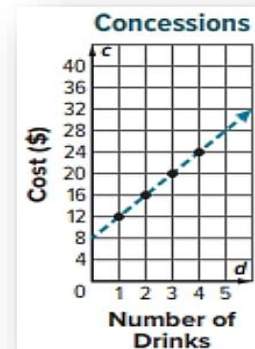2. **The equation c = 2b + 6 represents the total cost c of b sets of beads and one necklace string. Graph the relationship on the coordinate plane.**

Necklace Supplies

Cost ($)

20
18
16
14
12
10
8
6
4
2

0 1 2 3 4 5 6 7 8 9 10

Number of
Sets of Beads
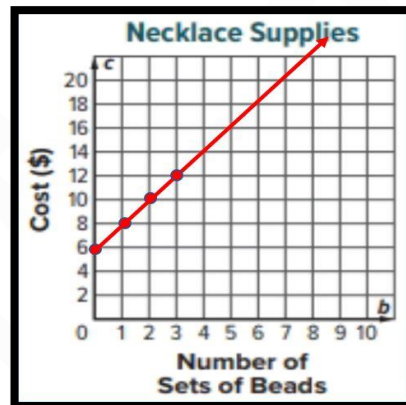
3. **The graph shows the total cost c of buying one large bucket of popcorn and d large drinks. Write an equation from the graph that could be used to find the total cost c if you buy one large bucket of popcorn and d large drinks.**
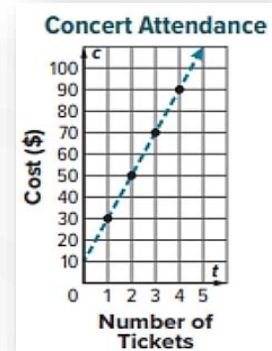
Concessions

Cost ($)

40
36
32
28
24
20
16
12
8
4

0 1 2 3 4 5

Number of
Drinks

.... $c = 4d + 8$.....................

23

4. **The graph shows the total cost C of buying one parking pass and t tickets to a concert. Write an equation from the graph that could be used to find the total cost c if you buy one parking pass and t tickets to a concert.**

……………… $c = 20t + 10$…………………..

Concert Attendance

بالنجاح والتوفيق

لا تنسونا من صالح دعائكم

Good Luck!
☺