

Grade Eight Review for Final – Unit 6

Multiple Choice Section

1. Which expression is represented by these algebra tiles?

NOTE: Shaded tiles are positive, White tiles are negative.

A) $-3(x + 1)$

B) $-3(x - 1)$

C) $3(x + 1)$

D) $3(x - 1)$



2. A taxi company charges a flat rate of \$2.50, plus \$0.50 for every kilometre driven. How far was the ride in taxi if the total cost was \$7.00?

A) 5 km

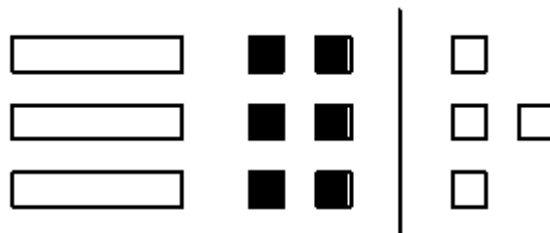
B) 9 km

C) 14 km

D) 19 km

3. What equation is modelled by the algebra tiles shown?

(Note: Shaded is positive, unshaded is negative)



A. $-6x + 3 = 4$

B. $-3x + 6 = -4$

C. $3x - 6 = 4$

D. $6x - 3 = -4$

4. A linear relation is represented in the table below, what is the value of y when $x = 3$?

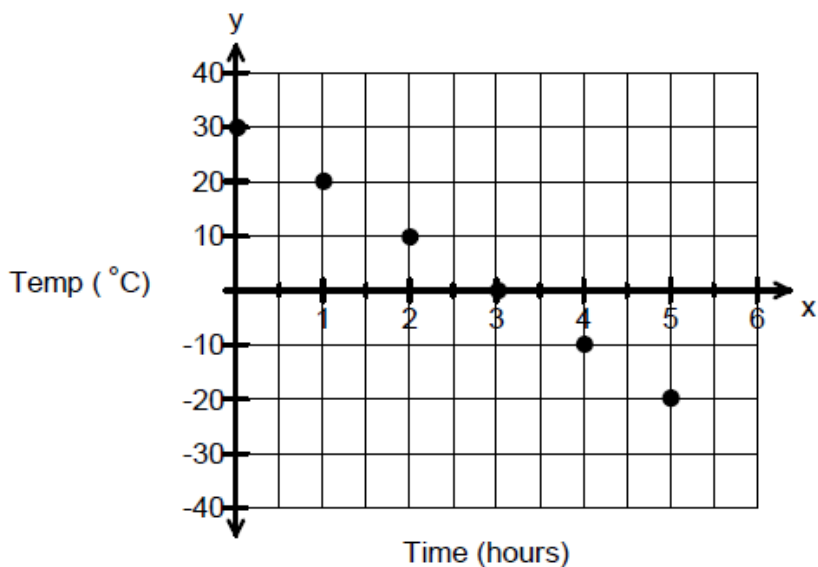
x	y
2	8
3	?
4	14
5	17
6	20

- A. 8
- B. 10
- C. 11
- D. 14
5. Solve for p : $\frac{p}{4} = -8$

- A. -32
- B. -2
- C. 2
- D. 32

6. Which ordered pair shows the time it takes the temperature to reach -10°C ?

- A. $(-4, -10)$
- B. $(-4, +10)$
- C. $(+4, -10)$
- D. $(+4, +10)$



7. Solve for x: $-2(x + 4) = 4$

- A. -6
- B. -2
- C. 0
- D. 2

8. A basketball team held a bake sale. They charged a \$2.00 admission fee and sold \$126.00 of baked goods. If the total profit was \$352.00, how many people attended?

- A. 113
- B. 239
- C. 452
- D. 956

9. What is the solution to the equation modelled?

Note: White tiles are positive and shaded tiles are negative.



- A. -2
- B. -8
- C. 2
- D. 8

10. John made a mistake in solving the equation $\frac{x}{2} + 3 = -9$.

At what step did he make his mistake?

Step 1: $\frac{x}{2} + 3 - 3 = -9 - 3$

Step 2: $\frac{x}{2} = -12$

Step 3: $\frac{x}{2} \div 2 = -12 \div 2$

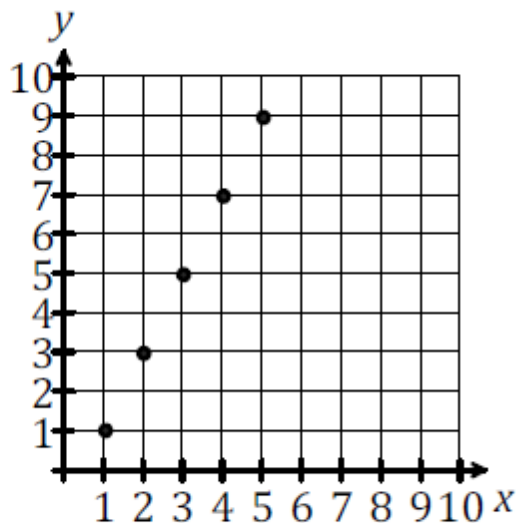
Step 4: $x = -6$

- A. Step 1
- B. Step 2
- C. Step 3
- D. Step 4

11. Solve: $15 = -6n + 3$

- A. $n = -2$
- B. $n = -3$
- C. $n = -18$
- D. $n = -72$

12. What is the relationship between the variables in the table?



- A. As the x -value increases by 1, the y -value decreases by 2.
 - B. As the x -value increases by 1, the y -value increases by 2.
 - C. As the x -value increases by 2, the y -value decreases by 1.
 - D. As the x -value increases by 2, the y -value increases by 1.
13. What is the missing number in the ordered pair for the linear relation $y = -2x + 1$?
(?, 7)
- A. -3
 - B. -4
 - C. -13
 - D. -15

Long Answer Section

14. Solve for x. $4x - 8 = -24$

15. Solve the following equations:

a) $\frac{x}{4} - 6 = 3$

b) $3x + 11 = -16$

16. Given the equation: $y = -2x + 3$

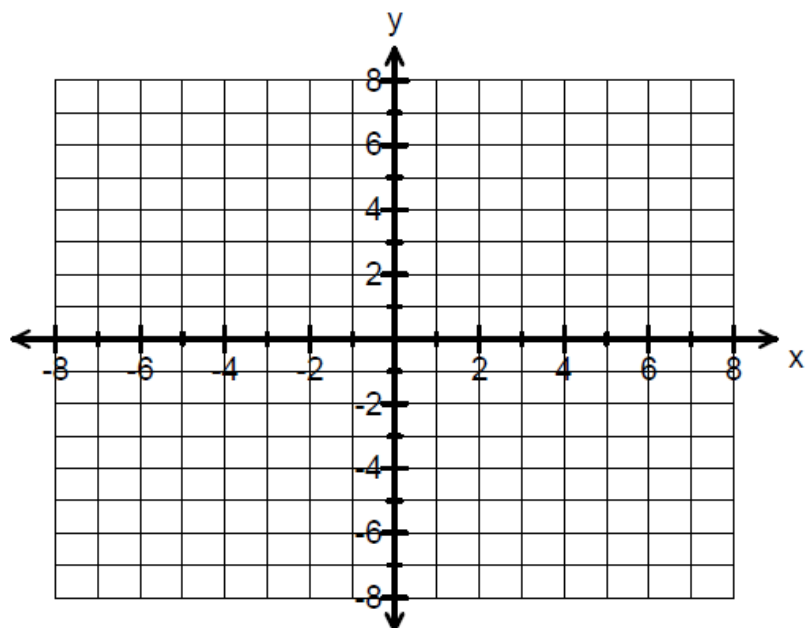
A. Complete the table.

[1 Mark]

B. Create a graph using the data in the table of values.

[1 Mark]

x	y
-2	
-1	
0	
1	
2	



17. Solve for x : $-3x - 4 = 8$

18. Solve: $-3(x - 4) = 6$

19. Herbie's gas tank holds 50 litres of gas.
Driving across the province his car burns 5 litres of gas per hour.
An equation for this relation is $L = 50 - 5h$ where L is the amount of gas in the car
and h is the hours spent driving.

A. Complete the table of values

time h	gas L
0	
2	
4	
6	
8	

B. Graph the relation

