

Name : _____ Pd: _____ Date : _____ Algebra 1 End Of Course Review - **Practice 2**

1) What is the **y-intercept** of the graph of $3y = 7x - 6$?

- A. $\frac{7}{3}$ B. -6 C. -2 D. $\frac{6}{7}$

2) Which expression is **equivalent** to $2\sqrt{108}$?

- A. $36\sqrt{3}$ B. $12\sqrt{3}$ C. $18\sqrt{5}$ D. $54\sqrt{2}$

3) Which function is **equivalent** to $g(x) = 3(x - 6)(x + 6)$?

- A. $3x^2 - 108$ C. $3x^2 - 36x - 108$
 B. $3x^2 + 108$ D. $3x^2 + 36x - 108$

4) Which ordered pair shows y as a function of x ?

- A. $\{(-1,2),(4,7),(5,-1),(6,6),(4,0)\}$
 B. $\{(10,5),(8,4),(4,2),(0,0),(-2,-1)\}$
 C. $\{(7,7),(-3,5),(8,-1),(7,-7),(6,3)\}$
 D. $\{(6,2),(6,-3),(6,0),(6,10),(6,8)\}$

5) Which function is **equivalent** to $y = 5x^2 - 10x + 1$?

- A. $y = 5(x + 1)^2 - 4$ C. $y = 5(x - 4)^2 + 1$
 B. $y = 5(x + 4)^2 + 1$ D. $y = 5(x - 1)^2 - 4$

6) What is the **solution** to $6m - 5 = 17 - 2(m - 1)$?

Answer : _____.

7) Which value of x is a **solution** to this equation?

$$10x^2 + 87x = 130$$

- A. $x = 8.7$ B. $x = -1.3$ C. $x = 5.6$ D. $x = -10$

8) What is the value of y in the **solution** to this **system of equations** ?

$$\begin{aligned} x + 5y &= 1 \\ 2x - 5y &= 17 \end{aligned}$$

- A. 6 B. 1 C. -1 D. -6

9) Which expression is **equivalent** to $6a^2 - 24a$?

- A. $6(4a - 1)$ C. $6a(a - 18)$
 B. $6a(a - 4)$ D. $6(18a - 1)$

10) Which expression is **equivalent** to $(6x - 1)(4x + 5)$?

- A. $24x^2 + 26x - 5$ C. $10x^2 + 26x - 5$
 B. $24x^2 - 26x + 5$ D. $10x^2 - 26x + 5$

11) What is the **y-intercept** of $y = \frac{1}{2}(6)^x$?

Answer : _____.

12) Which expression is **equivalent** to:

$$6a^2 - 2 + 5a - 7 - 4a + a^2$$

- A. $5a^2 + 9a - 5$ C. $7a^2 + a - 9$
 B. $2a^2 - 9a - 3$ D. $4a^2 - 2a - 3$

13) Which **value of x** makes the equation

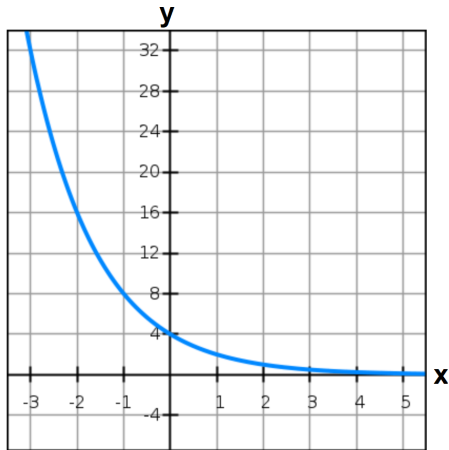
$$2(5x - 3) - 7 = 8 - 2x \text{ true?}$$

- A. 1.75 B. 1.25 C. 1.5 D. 2

14) What is the **positive solution** to $x^2 - 9x = 36$?

Answer : _____.

15) An **exponential** function is graphed on the grid.



Which function is best represented by the graph?

- A. $f(x) = \frac{1}{2}(4)^x$ C. $f(x) = 4 - (\frac{1}{2})^x$
 B. $f(x) = 4(\frac{1}{2})^x$ D. $f(x) = 4(2)^x$

16) What is the equation in **slope-intercept form** of the line that passes through the points $(-1, 4)$ and $(3, 24)$?

- A. $y = 9x + 5$ C. $y = 0.2x + 5$
 B. $y = 0.2x + 9$ D. $y = 5x + 9$

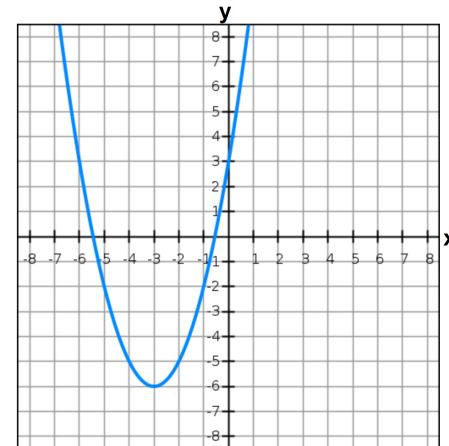
17) The **table** shows a linear relationship between x and y.

x	-4	0	10	12
y	8	12	17	18

What is the **rate of change** of y with respect to x?

- A. -2 B. $-\frac{1}{2}$ C. $\frac{1}{2}$ D. 2

18) The graph of a **quadratic function** is shown on the grid.



Which function is best represented by this graph?

- A. $f(x) = x^2 + 3x + 6$ C. $f(x) = x^2 - 3x + 6$
 B. $f(x) = x^2 + 6x + 3$ D. $f(x) = x^2 - 6x + 3$

Answer Key-2

1	C
2	B
3	A
4	B
5	D
6	3
7	D
8	C
9	B
10	A
11	0.5

Answer Key-2

12	C
13	A
14	12
15	B
16	D
17	C
18	B