

**Question 1:** What is the **solution**

to  $-2(6x - 3) = 6x - 2(8x + 12)$ ?

- A. 15
- B. 12
- C. 6
- D. No Solution

**Question 2:** What is the **solution** to the **system of equations**?

$$-x + 2y = 2$$

$$y = \frac{1}{6}x - 1$$

- A.  $(-2, 6)$
- B.  $(2, -1)$
- C.  $(-\frac{8}{3}, \frac{5}{2})$
- D.  $(-6, -2)$

**Question 3:** What are the **solutions** to  $3(x - 5)^2 - 2 = 16$ ?

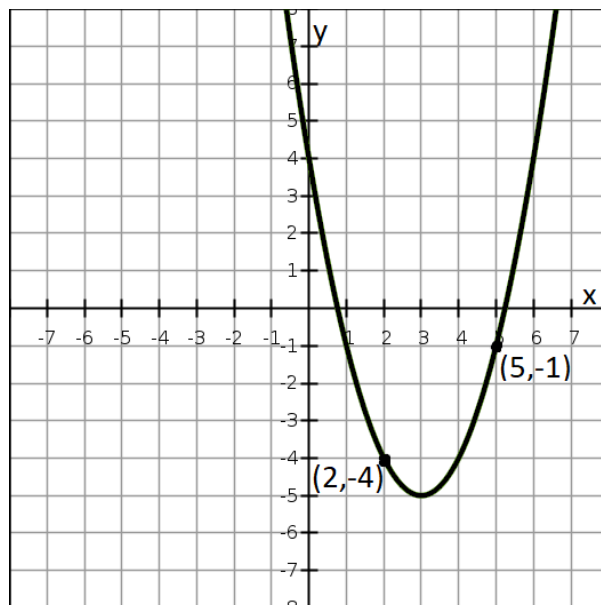
- F. 2 and 5
- G. -4 and 4
- H.  $x = 5 \pm \sqrt{6}$
- J.  $x = 2 \pm \sqrt{35}$

**Question 4:** What is the **solution**

**set** for  $2(5x + 4) > 6x + 14$  ?

- A.  $x > 1.5$
- B.  $x < 5$
- C.  $x < 1.5$
- D.  $x > 5$

**Question 5:** Which ordered pair best represents the location of the y-intercept?



- A.  $(2, -4)$
- B.  $(4, 0)$
- C.  $(0, -4)$
- D.  $(0, 4)$

**Question 6:** Which ordered pair is in the solution set of  $-2x + y < 4$  ?

- F.  $(1, 6)$
- G.  $(2, 3)$
- H.  $(-2, 3)$
- J.  $(-3, 2)$

**Question 7:** Given that function  $p(x) = 2(6 - x)^2 - 5$ . What is the **value** of  $p(-4)$ ?

**Answer:** \_\_\_\_\_

**Question 8:** What **value** of x makes

$0.6(2x - 4) = 17 + 0.25(x + 6)$  **true**?

- F. -22
- G. 26
- H. -26
- J. 22

**Question 9:** Which **expression** is equivalent to  $\sqrt{176}$ ?

- A.  $4\sqrt{7}$
- B.  $11\sqrt{7}$
- C.  $4\sqrt{11}$
- D.  $14\sqrt{11}$

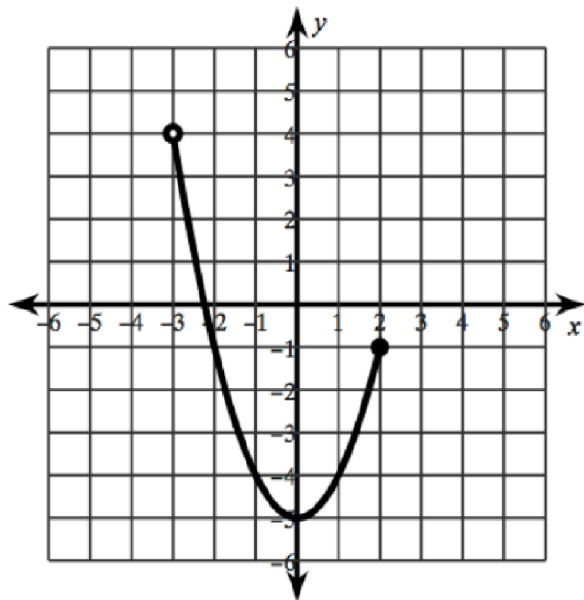
**Question 10:** Which **expression** is equivalent to  $16x^2 + 4x - 6$  ?

- A.  $2(4x + 3)(2x - 1)$
- B.  $2(4x - 1)(2x + 3)$
- C.  $3(2x + 3)(2x - 1)$
- D.  $3(3x + 4)(x - 1)$

**Question 11:** Which of the following is **equivalent** to  $5x - 7y = 14$

- F.  $y = -\frac{7}{5}x + 2$
- G.  $y = \frac{5}{7}x - 2$
- H.  $y = \frac{5}{14}x + 2$
- J.  $y = \frac{5}{7}x - \frac{7}{11}$

**Question 12:** The graph of part of **linear function g** is shown. Which inequality best represents the **range** of the part shown?



- F.  $-3 < x \leq 2$
- G.  $-5 \leq g(x) < 4$
- H.  $-3 \leq x < 2$
- J.  $-1 < g(x) \leq 4$

**Question 13:** Which **expression** is a **factor** of  $24x^2 - 10x - 6$  ?

- A.  $6x - 2$
- B.  $8x - 3$
- C.  $12x + 6$
- D.  $4x - 3$

**Question 14:** What is the **slope** of the line that passes through the points  $(33, 18)$  and  $(-22, -7)$  ?

- A.  $\frac{5}{11}$
- B.  $-11$
- C.  $-\frac{1}{11}$
- D.  $\frac{11}{5}$

**Question 15:** Which **expression** is **equivalent** to  $p^2 - 10p + 24$  ?

- A.  $(p - 3)(p - 8)$
- B.  $(p - 2)(p - 12)$
- C.  $(p - 4)(p - 6)$
- D.  $(p - 3)(p + 8)$

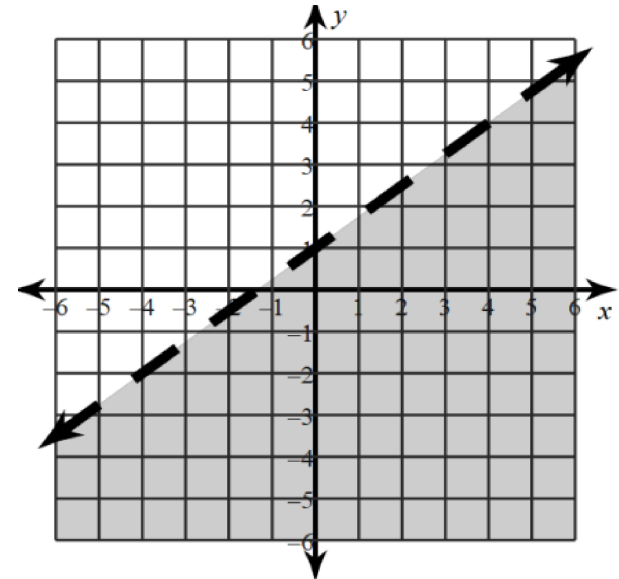
**Question 16:** Which **equation** in has a graph that passes through the **point**  $(4, -7)$  and has a **slope** of  $\frac{9}{4}$  ?

- A.  $9x - 4y = 48$
- B.  $-9x + 4y = 38$
- C.  $9x + 4y = 28$
- D.  $9x - 4y = -18$

**Question 17:** The value of  $y$  is **directly proportional** to the value of  $x$ . If  $y = 300$  when  $x = 245$ , what is the value of  $x$  when  $y = 12$  ?

**Answer :** \_\_\_\_\_ .

**Question 18:** Which **inequality** best represents the **graph** shown below



- A.  $y \leq -\frac{3}{4}x + 1$
- B.  $y \geq -\frac{3}{4}x + 1$
- C.  $y < -\frac{3}{4}x + 1$
- D.  $y > -\frac{3}{4}x + 1$

**Question 19:** Which **expression** is **equivalent** to  $\frac{(x^7)^3}{x^{-4}}$  ?

- F.  $x^{17}$
- G.  $x^{25}$
- H.  $x^{14}$
- J.  $x^6$

**Question 20:** What is the **equation** of the line passes through the **point**  $(3, -8)$  has a **slope** of 0?

- A.  $x = 3$
- B.  $y = 3$
- C.  $x = -8$
- D.  $y = -8$