

Question 1: What is the **solution**

to $3(3x + 4) - 5 = 7(x - 3)$?

- A. 16
- B. 1
- C. -14
- D. No Solution

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

$$x - 5y = -15$$

$$y = 3x - 4$$

- A. (-5, 3)
- B. (2, 4)
- C. ($\frac{5}{2}, \frac{7}{2}$)
- D. (-4, -5)

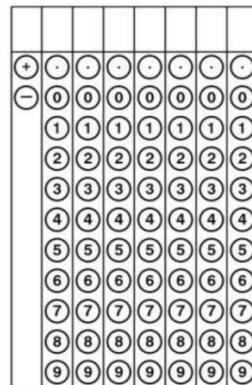
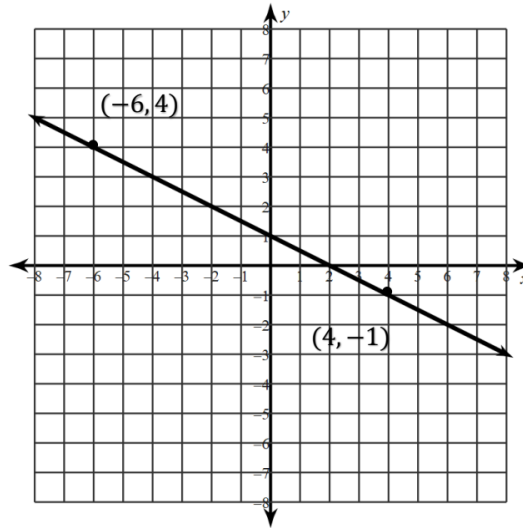
Question 3: What are the **solutions** to $4(x - 8)^2 - 7 = 37$?

- F. $x = 8 \pm \sqrt{11}$
- G. 5 and 12
- H. $x = 5 \pm \sqrt{8}$
- J. $x = 2 \pm \sqrt{37}$

Question 4: What is the **solution set** for $2(4x + 6) \geq 4x + 2$?

- A. $x \geq -2.5$
- B. $x < 4$
- C. $x \leq 4$
- D. $x > -2.5$

Question 5: What is the zero of the function below?



Question 6: Which ordered pair is in the solution set of $3x + 4y < 8$?

- F. (7, 3)
- G. (-5, 8)
- H. (4, -1)
- J. (-4, 2)

Question 7: Given that function

$$p(x) = 3(-x + 7)^2 - 25$$

What is the **value** of $p(-3)$?

Answer: _____

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

$$-0.3(10x + 60) = 5x + 0.8(5x + 90)$$

true?

- F. 23
- G. 35
- H. -27
- J. -15

Question 9: Which **expression** is equivalent to $\sqrt{315}$?

- A. $15\sqrt{5}$
- B. $3\sqrt{35}$
- C. $8\sqrt{17}$
- D. $9\sqrt{14}$

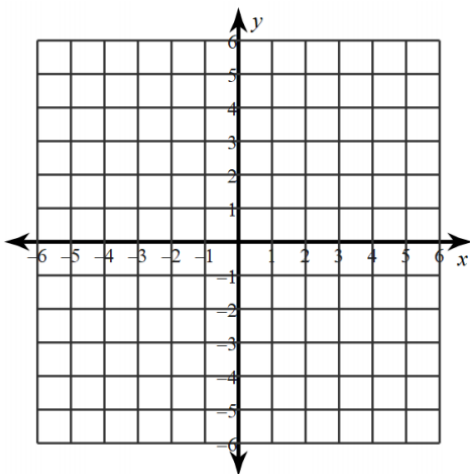
Question 10: Which **expression** is equivalent to $24x^2 + 32x$?

- A. $8x(3x + 4)$
- B. $6x(4x - 5)$
- C. $4x(6x + 3)$
- D. $2(12x - 15)$

Question 11: Which of the following is **equivalent** to $4x - 12y = 36$

- F. $y = -\frac{1}{3}x + 2$
- G. $y = \frac{1}{3}x + 3$
- H. $y = 3x + 2$
- J. $y = -3x + 3$

Question 12: What is the domain of the following function? $f(x) = 17x^2 - 5$



- F. $f(x) = -5$
- H. $-5 \leq x < 6$
- G. $-5 \leq g(x) < 6$
- J. *All real numbers*

Question 13: Which **expression** is a **factor** of $9x^2 - 25$?

- A. $9x - 5$
- C. $3x + 5$
- B. $3x - 25$
- D. $x + 5$

Question 14: What is the **slope** of the line that passes through the points $(15, 59)$ and $(-25, -13)$?

- A. $-\frac{9}{5}$
- C. $\frac{9}{5}$
- B. $-\frac{5}{9}$
- D. $\frac{5}{9}$

Question 15: Which **expression** is **equivalent** to $a^2 - a - 56$?

- A. $(a - 2)(a - 28)$
- C. $(a - 7)(a + 8)$
- B. $(a + 2)(p - 28)$
- D. $(a + 7)(a - 8)$

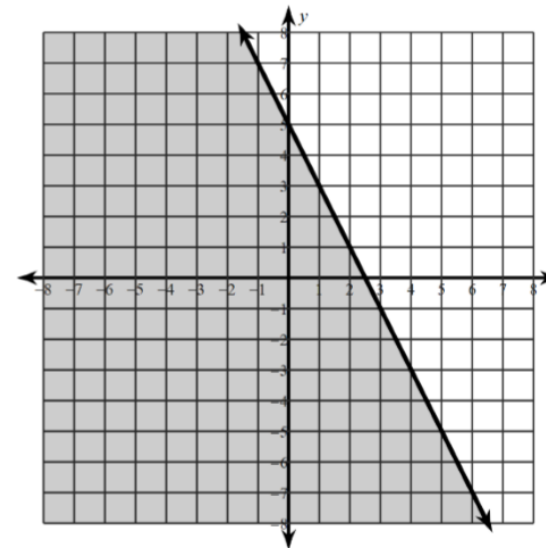
Question 16: Which **equation** in **standard form** has a graph that passes through the **point** $(7, 1)$ and has a **slope** of $-\frac{2}{7}$?

- A. $2x - 7y = 35$
- C. $-2x + 7y = 28$
- B. $2x + 7y = 21$
- D. $-2x - 7y = -14$

Question 17: The value of y is **directly proportional** to the value of x . If $y = 168$ when $x = 510$, what is the value of y when $x = 34$?

Answer : _____ .

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



- A. $y \leq -\frac{1}{2}x + 5$
- C. $y < -\frac{1}{2}x + 5$
- B. $y \geq -2x + 5$
- D. $y > -2x + 5$

Question 19: Which **expression** is **equivalent** to $\frac{(x^2)^7}{x^{-9}}$?

- F. x^{18}
- H. x^1
- G. x^{23}
- J. x^{12}

Question 20: What is the **equation** of the line passes through the **point** $(7, -2)$ has a **slope** of 0?

- A. $x = 7$
- C. $x = -2$
- B. $y = 7$
- D. $y = -2$