

Name: _____ Date: _____

1. Which number is prime?

2. Find the GCF for 14 and 21.

3. Find the GCF for 23 and 37.

4. Evaluate. $(15 - 5) \div [(12 \div 2 \times 2) - 2]$

5. Evaluate. $-|-43|$

6. Find the median.
25, 19, 22, 34, 36

7. Find the median.
22, 19, 33, 41, 42, 3, 48, 35

8. Evaluate. $(-4)^2 + 2$

9. Evaluate. $8 + 2 \times 5 - 24 \div 6 \times 2$

10. Combine like terms.
 $3r + 4s - 6r$

11. Multiply.
 $a^4b^2 \times ab^3$

12. Divide.
$$\frac{50p^9q^5}{10pq^2}$$

13. Is -4 a solution to the equation $7x - 5 + 3x = 6 + x - 10$

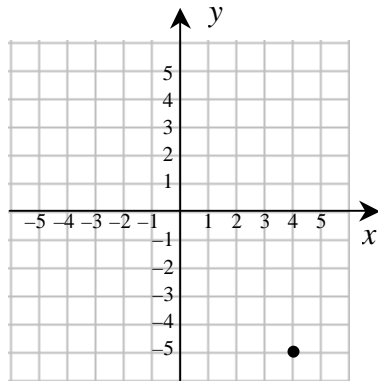
14. Solve. $21 - 7x = 14$

15. The length of one of the equal legs of an isosceles triangle is 8 cm less than 4 times the length of the base. If the perimeter is 29 cm, find the length of one of the equal legs.

16. The perimeter of a rectangle is to be no greater than 300 in., and the length must be 125 in. Find the maximum width of the rectangle.

17. Which of the ordered pairs is a solution for the equation $5x - 4y = 20$?

18. Give the coordinates of the point graphed below.



19. Graph $3x + 2y = 6$.

20. Graph $y = \frac{3}{4}x - 4$.

21. Find the y-intercept.
 $-3x + y = -15$

22. Determine which two equations represent parallel lines.

Explain your answer for to earn credit on the choice.

(a) $y = 5x - 6$

(b) $y = -5x + 6$

(c) $y = 5x + 3$

(d) $y = -\frac{1}{5}x - 6$

A) (a) and (b)

B) (b) and (c)

C) (a) and (c)

D) (a) and (d)

23. Write the equation of the line passing through $(-3, -3)$ and $(-3, 1)$.

24. Graph the inequality.

$$y \geq 3x$$

25. Given $f(x) = 5x + 5$, find $f(a + 4)$.

26. Solve the system by **graphing**.

$$x - y = 5$$

$$x + y = 3$$

27. Solve the system by **addition**.

$$5x - 3y = 13$$

$$4x - 3y = 11$$

28. Solve the system by **substitution**.

$$2x - 2y = 6$$

$$y = 2x - 13$$

29. Solve the following system of linear inequalities by graphing.

$$x + 2y \geq 3$$

$$2x - 3y \leq 6$$

30. Solve the following system of linear inequalities by graphing.

$$3x + 4y \leq 12$$

$$x + 3y \leq 6$$

$$x \geq 0$$

$$y \geq 0$$