

1. Identify all of the sets of numbers to which each belongs:

a. 4 b. -2 c. $\frac{2}{3}$ d. $\sqrt{5}$

2. Write an example of the commutative property.

3. Write an example of the identity (addition)

4. Name the property: $2(x + 3) = 2x + 6$

5. Name the property: $4 \times \frac{1}{4} = 1$

6. Name the property: $(9 + y) + 2 = 9 + (y + 2)$

Evaluate.

7. $2a^3 + (2a)^2$ when $a = -3$.

8. $-4rs + (-rs) - 2r^2$ when $r = 3$ and $s = -4$

Simplify.

9. $32 - (9)(5) \div 3$

10. $\frac{6(4-1)^2}{3-7}$

Solve.

11. $7x - 24 = 11$

12. $\frac{-2}{3}x + 6 = \frac{5}{6}x - \frac{7}{4}$

13. $3(2x - 3) = 5 - (3 - 2x)$

14. $-2(3x - 4) + 3(x - 2) = -3x + 2$

15. $2|x - 1| - 3 = 11$

Solve for the indicated variable.

16. Solve for A : $B = \frac{2}{3}(A - 9)$.

17. Solve for u : $-3u - w = u + 5w$

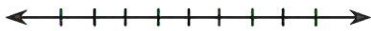
18. Solve for b : $N = 2a^2b$.

19. Solve for y : $3x - 2y = 10$

Solve the inequality. **Then graph your solution.**

20. $3x - 5 < -17$

21. $x + 4 \geq 14$ or $x - 3 \leq 5$



22. $-9 \leq 3x - 15 \leq 18$

23. $|2x - 5| > 1$



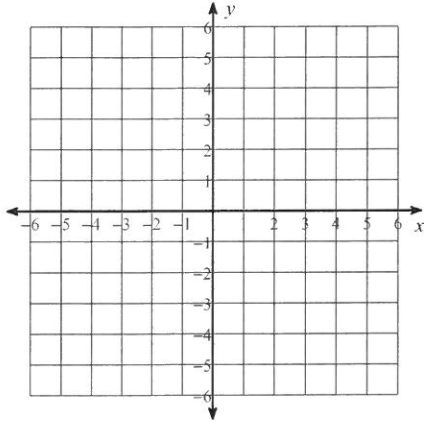
24. $|2x - 3| \leq 5$



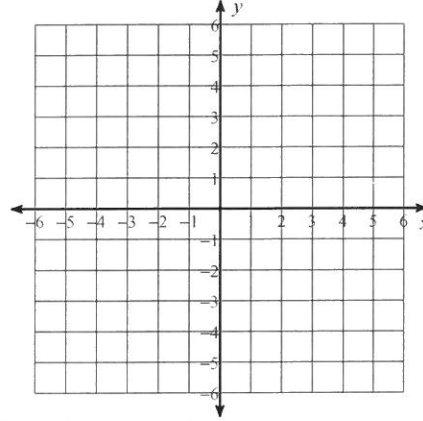
Unit 0 review questions

Sketch the graph of each line.

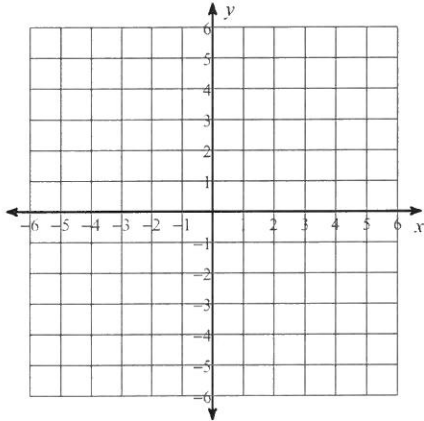
25) $y = \frac{2}{3}x - 4$



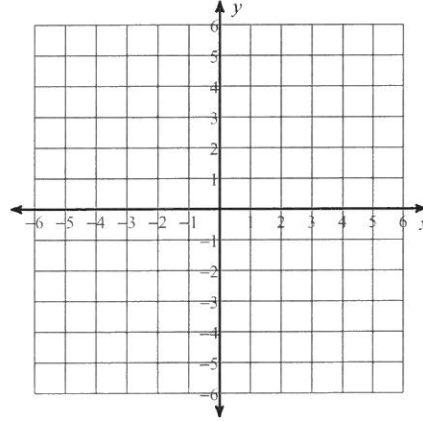
26) $y = -\frac{5}{2}x + 4$



27) $x = 4$

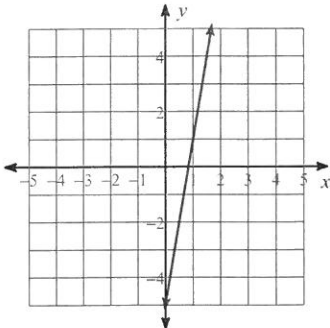


28) $4x - 5y = 25$



Write the slope-intercept form of the equation of each line.

29)



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

30) Slope = -3, y-intercept = 1

Write the slope-intercept form of the equation of each line.

31) $7x - 8y = -16$

32) $x - y = -2$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

33) through: $(-2, -1)$, slope = -2

34) through: $(1, 3)$, slope = 0

Write the slope-intercept form of the equation of the line through the given points.

35) through: $(0, -1)$ and $(-1, -3)$

36) through: $(4, -2)$ and $(-4, -3)$

Write the slope-intercept form of the equation of the line described.

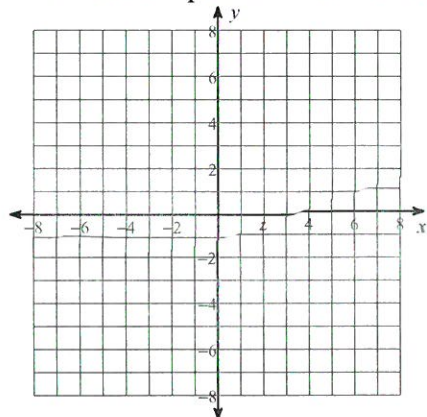
37) through: $(-2, -2)$, parallel to $y = 2x$

38) through: $(4, 5)$, perp. to $y = -\frac{2}{5}x + 2$

39) Given data: $(3, 1)$ $(5, 2)$ $(-1, -4)$ $(-3, -6)$ $(6, 3)$

40) Using your previous scatterplot and points:
 $(5, 2)$ $(-1, -4)$

Draw a scatterplot and line of best fit.



Find an equation for your line and predict the value at $x=7$