

Sketch the graph of each line:

1. $y = \frac{7}{4}x - 4$

2. $2x + 3y = -6$

3. $(y - 4) = 2(x - 1)$

4. $(y - 6) = 4x + 8$

Write the equation of each line using the given points:

5. $(-1, -1)$ & $(3, 4)$ Slope-Intercept Form

6. $(-2, -1)$ & $(0, 1)$ Standard Form

7. $(3, 3)$ & $(-1, 4)$ Point Slope Form

Solve each equation:

8. $|-4 + 5x| = 16$

9. $5 - 8|-2n| = -75$

10. $\left|\frac{4x+3}{5}\right| = 2$

Solve each inequality and graph on a number line:

11. $3(6a - 8) \geq 48$

12. $\frac{-10+m}{3} < 3$

13. $|3x - 4| > 6$

Solve the equation:

14. $3x + 5 = \frac{7}{3}x - 2$

15. $\frac{3}{2}x - 7 = 4$

$$16. \frac{3x}{4} - \frac{5x+3}{2} = \frac{7}{3}$$

Word Problems:

17. For a field trip, 4 students rode in cars and the rest filled 9 buses. How many students were in each bus if 472 students were on the trip?

18. A t-shirt costs \$25.64 after tax. Tax is 6%. Find the cost of the t-shirt before tax was applied.

Challenge Problems:

19. Solve: $|x - 2| - |x + 2| > x$

20. Solve: $d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$ for y_1