

1. Is it a subtraction problem?

no

yes

Change it to an addition sentence.

2. Are there grouping symbols?

no

yes

Distribute.

3. Are there variables on the right side?

no

yes

Move them to the left side.

combine/simplify left side

4. Is there a number *not* attached to the variable?

no

yes

Move it to the right side (combine).

5. Is there a number attached to the variable?

no

yes

1. if by \times → then \div

2. if by \div → then \times

3. if a fraction → then use reciprocal

variable = #

variable = #

Multi-Step Equations

Date _____ Period _____

Solve each equation.

1) $-20 = -4x - 6x$

2) $6 = 1 - 2n + 5$

3) $8x - 2 = -9 + 7x$

4) $a + 5 = -5a + 5$

5) $4m - 4 = 4m$

6) $p - 1 = 5p + 3p - 8$

7) $5p - 14 = 8p + 4$

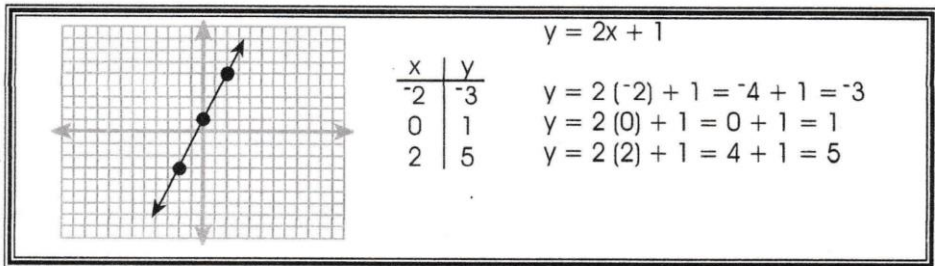
8) $p - 4 = -9 + p$

9) $-8 = -(x + 4)$

10) $12 = -4(-6x - 3)$

Graphing Lines

I. Plotting points.



Graph the following lines by plotting points. Use your own graph paper.

1. $y = x + 3$

2. $y = -x + 4$

3. $y = \frac{1}{2}x + 2$

4. $y = -\frac{1}{3}x + 1$

5. $y = 2x - 3$

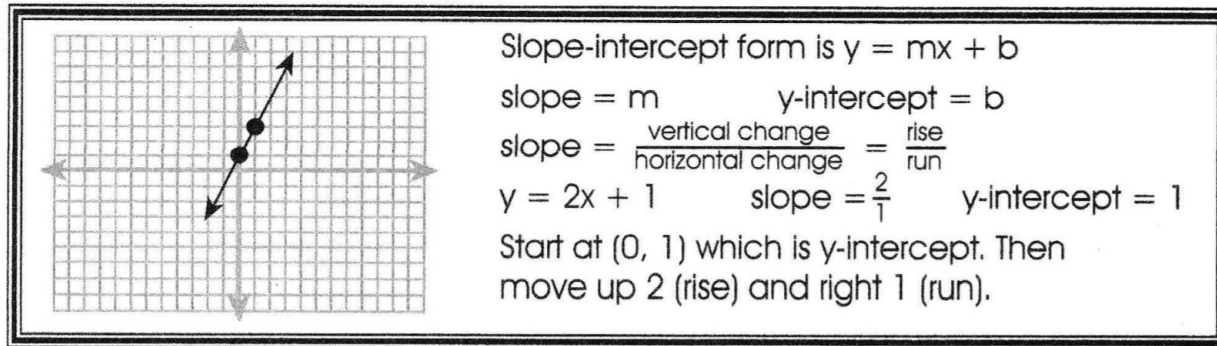
6. $y = \frac{1}{2}x - 3$

7. $2x - 3y = 6$

8. $3x + 4y = 12$

9. $5x - 2y = 10$

II. Slope-Intercept.



Graph the following lines by using the slope and y-intercept. Use your own graph paper.

1. $y = x + 3$

2. $y = -x + 4$

3. $y = \frac{1}{2}x + 2$

4. $y = -\frac{1}{3}x + 1$

5. $y = 2x - 3$

6. $y = \frac{1}{2}x - 3$

7. $2x - 3y = 6$

8. $3x + 4y = 12$

9. $5x - 2y = 10$