

2.2a SOLVING EQUATIONS

A. "Getting rid of" coefficients (number times variable) by dividing:

1. $3x = 6$

2. $-2x = 8$

3. $8x = -64$

B. "Getting rid of" signs by adding the opposite:

1. $x + 3 = 8$

2. $x - 7 = -8$

3. $-9 = y - 6$

4. $5t + 4 = -11$

5. $-5 = 6m + 2$

6. $-5y = -2y + 7$

7. $2x + 6 = 7x$

8. $3x - 13 = -9 + 2x$

9. $-4m - 3 = 2m + 8$

10. $-3x + 4 = 5 - 7x$

11. $5m - 4 = m + 12$

12. $6y - 1 = -4y + 9$

C. Getting rid of parentheses by distributing. REMEMBER TO COMBINE LIKE TERMS.

1. $2(x - 4) = -12$

2. $-2(3x + 1) = 4(x - 5)$

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

4. $5x - (6 - x) = -x + 4$

5. $6m + 8 = 9 - (4m + 1)$

6. $2(3x - 1) - 3x = 2x + 3$

7. $3x + 4 = 9 - 2(3x - 2)$

8. $12 - 3(2x - 3) = 2(x + 4)$

D. YOU TRY:

1. $-5m + 6 = 9m$

2. $8x - 4 = 2(3x - 5)$

3. $7y - (y + 4) = 3y + 8$

4. $5m - 4 = 3m - 4(3m + 1)$