

# Solving Equations and Solving for a Variable Review

Hint: Get a common denominator

$$\frac{1}{6}x + \frac{2}{3} = \frac{1}{2}x$$

Hint: Combine like terms on each side first.

$$15 - 8x - 2 = 3 + 6x - 26 - 2x$$

Know how to solve two different ways!

$$5(x - 3) = 10 + 30x$$

Hint: Distribute then combine like terms on each side.

$$7(x - 2) + 20 = 6(x + 1) + 6$$

Hint: Distribute the negative one!

$$3(x - 5) - (x - 5) = 2x - 10$$

Hint: Distribute on both sides first!

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

Stephen, Jessica, Matthew, and Daniel's ages are consecutive whole numbers. Stephen is the oldest. The sum of their ages is 94. How old is Stephen?

Anne, Ben, and Nate are doing push-ups. Anne does some, but Ben does 1 more than Anne. Nate does three times as much as Anne. If they do 61 pushups total, how many did Anne do?

a) Define a variable.

b) Set up an equation that describes this situation.

A rectangular garden is fenced on all sides with 256 feet of fencing. The garden is 8 feet longer than it is wide. Find the length and width of the garden.

**Draw a picture first!**

One moving company charges \$800 plus \$16 per hour. Another moving company charges \$720 plus \$21 per hour. At what number of hours will the charge by both companies be the same?

Quiz will be similar to this review sheet and old homework

Things you can study to prepare:

- ✓ Any notes from this week
- ✓ Rework missed problems on tan sheet on solving equations (key is on my website)
  - ✓ This Review Sheet (key will be on my website)
  - ✓ Powerpoints (on website)