MathFLIX CHALLENGE
• Guess & Check vs Simultaneous Equations •
Which do you prefer?

There are many different strategies we can use to solve problems. Each of the following problems have 2 variables. Review our sample, then decide which strategy you like best!

1. Marcus sold small and large boxes of candy. A small box cost $3. A large box cost $5. Marcus sold 50 boxes of candy and collected $180. How many of each size boxes did he sell?
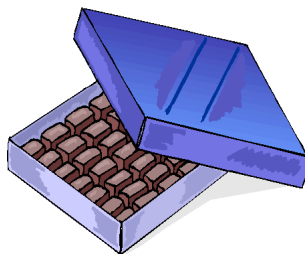
Simlutaneous Equation Startegy		Guess & Check Startegy

Simlutaneous Equation Startegy

Equation # 1

$x + y = 50$

or

$y = 50 - x$

Equation # 2

$3x + 5y = 180$

Simultaneous Equations
(Eliminate y. Substitue y = 50-x

$3x + 5(50 - x) = 180$
$3x + 250 - 5x = 180$
$-2x = ?$

Once we find the value of x, how will we solve y?

Guess & Check Startegy

Guess #1
25 small boxes
25 large boxes
(25+25 = 50)

$$\$3(25) + \$5(25) = \$200$$

Guess #2
20 small boxes
30 large boxes
(20 + 30 = 50)

$$\$3(20) + \$5(30) = ?$$

Have we solved the problem with these two guesses?

2. Marcus sold small and large boxes of candy. A small box cost $3. A large box cost $5. Marcus sold 50 boxes of candy and collected $160. How many of each size boxes did he sell?

3. Marcus has 7 cards worth $25 total. He has $5 cards and $3 cards. How many of each card does Marcus have?

Hooray for Marcus...he used different strategies to solve his problems!