

## Unit 3 - Solving Equations

### Day 9: Modelling with Algebra (second day)

Today we will...

Define variables and create equations to solve real-world problems.

Ex 1. Lake Ontario is four times as deep as lake Erie. The sum of their depths is 300m. What is the depth of each lake?

Ex. 2 Ben plays on the Eastwood basketball team. He gets 3 points if he gets a basket outside the 3 point line and 2 points if he gets a basket inside the 3 point line. He scored 61 baskets giving him 140 points in the season. How many 3 point and 2 point shots did he make in his season?

Ex. 3 You make a new coffee mixture that combines Coffee A and Coffee B that sells for \$5.56/lb. If Coffee A cost \$6.15/lb and Coffee B cost \$3.20/lb, how much of each kind of Coffee are needed to make up a 15 lbs mixture?

Ex. 4 Jack has \$4.25 in nickels and dimes. If he has 54 coins altogether, how many of each does he have?

	Nickels	Dimes	Total
Number of Each			
Value of Each			