

Name _____
Date _____ Period ____ A# _____

5D Differentiated Problems (Set A)

Show all work on a separate piece of graph paper. Please follow the 5D Method – make sure you define your variables!!

(Required problem)

Aimee cut a string that was originally 126 centimeters long into two pieces so that one piece is twice as long as the other. *How long is each piece?*

(Choose two of the four below)

The perimeter of a triangle is 37 inches. The second side is twice the length of the first side. The third side is five inches longer than the first side. *What are the dimensions?*

The perimeter of a rectangular goat pen is 48 yards. The length is three less than twice the width. *What is the length?*

Chelsea and Kate are sisters. They wanted to buy their Mom a birthday gift. Chelsea contributed three dollars more than three times the amount of Kate. Together they spent \$159. *How much did Chelsea spend on the gift?*

Allie, Beth, and Carly are cousins. Allie is three years older than Beth. Carly is twice as old as Beth. Together, the sum of their ages is 81. *How old is Allie? How old is Beth? How old is Carly?*

Name _____
Date _____ Period ____ A# _____

5D Differentiated Problems (Set B)

Show all work on a separate piece of graph paper. Please follow the 5D Method – make sure you define your variables!!

(Required Problem)

Chelsea and Kate are sisters. They wanted to buy their Mom a birthday gift. Chelsea contributed three dollars more than three times the amount of Kate. Together they spent \$159. *How much did Chelsea spend on the gift?*

(Choose two of the three below)

Miss Weighall and Mrs. Talmage both have dogs named Bug. They love their dogs very much. In fact, they love them so much that they cook homemade food for them to eat each night. The recipe for the dog food calls for rice, chicken and veggies. The number of ounces of chicken is twice the amount of rice. The veggies call for two more ounces than the chicken. Together, the chicken and the rice weigh 12 ounces. *How many ounces of veggies should be used to make the dog food?*

The perimeter of a rectangular goat pen is 48 yards. The length is three less than twice the width. *What is the length?*

The sum of three consecutive odd numbers is 135. *What are those three numbers?*

A scoop of ice cream has five times more calories than the cone by itself. If a cone with two scoops of ice cream is 495 calories, *how many calories are in one scoop of ice cream?*

5D Differentiated Problems (Set C)

Show all work on a separate piece of graph paper. Remember to define variables! (Tables are optional.)

(Required Problem)

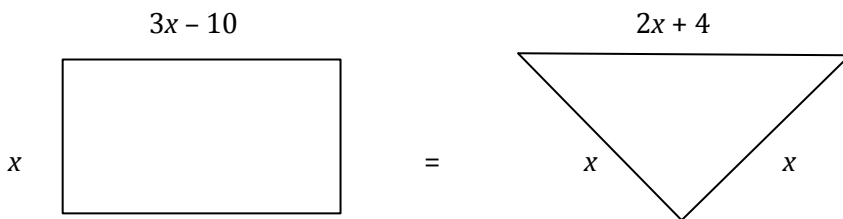
A scoop of ice cream has five times more calories than the cone by itself. If a cone with two scoops of ice cream is 495 calories, *how many calories are in one scoop of ice cream?*

(Choose two of the four below)

Bill, Pete, and Mary are jogging at Spring Lake. They are training for a 10k race (about 6 miles). Mary runs five miles more than Bill. Pete runs one mile less than three times as many miles as Bill. Mary and Pete ran the same distance. *How far did Bill run? Will he be prepared to run the 10k race?*

OH NO! The power has gone out in your apartment and your appliances have lost electricity. The fridge is currently at 40° F and is getting 5 degrees warmer every hour. The oven is currently at 340° F and is getting 45 degrees colder every hour. *After how many hours will the fridge and the oven have the same temperature?*

The perimeters of these two shapes are equal. *What is the area of the rectangle?*



Miss Weighall makes sweet treats and sells them online at www.kikideeks.com. She sells cookie dough for \$10 a box and caramel corn for \$5 a bag. This month, she sold five more bags of caramel corn than boxes of cookie dough. She made a profit of \$175. How many boxes of cookie dough did she sell?