

Name \_\_\_\_\_

Date \_\_\_\_\_

**Homework #17**

Period \_\_\_\_\_

1) If  $n$  is an odd integer, which equation can be used to find three consecutive odd integers whose sum is  $-3$ ?

(1)  $n + (n + 1) + (n + 3) = -3$

(2)  $n + (n + 1) + (n + 2) = -3$

(3)  $n + (n + 2) + (n + 4) = -3$

(4)  $n + (n + 2) + (n + 3) = -3$

2) Michael is 25 years younger than his father. The sum of their ages is 53. What is Michael's age?

(1) 14

(2) 25

(3) 28

(4) 39

3) Set up an equation to show the following: Do not solve it. There are three consecutive positive even integers such that the product of the second and third integers is twenty more than ten times the first integer.

4) The difference between two numbers is 28. The larger number is 8 less than twice the smaller number. Find *both* numbers. [Only an algebraic solution can receive full credit.]

5) Sam and Alex play Tennis. On the weekend Sam played 4 more games than Alex did, and together they played 12 games. How many games did Alex play? Show this algebraically!

- 6) The length of a room is ten more than three times the width.
- (a) Draw a diagram of the room that includes the expressions for length and width.
  - (b) Find the area
  - (c) Find the perimeter

7) John is 3 years older than Jim. Jim is 4 years less than twice David's age. How old are the three boys if their ages add up to 35?

8) There are 77 pieces of candy in a candy dish. There are twice as many Starbursts as Hershey kisses. There are three less pieces of taffy than Hershey kisses.