

## Mathematics 101 Worksheet 1.5-1.7

### Problems

1) Sharyn invests \$2000 more in an account that earns 9% simple interest than she invests in an account that earns 6% simple interest. How much did she invest in each account if her total interest is \$405 after 1 year?

2) Of three consecutive even integers, the sum of the smallest two integers is equal to 6 more than the largest. Find the integers.

3) Dave earned the following test scores in his biology class: 82%, 88%, 92%, and 93%. How high does he have to score on the 5th test to have an average of 90% or more?

4) Solve for the indicated variable.

a)  $3x - 2y = 4$  for  $y$

b)  $S = 2\pi r + \pi^2 h$  for  $h$

c)  $A = \frac{1}{2}bh$  for  $b$

5) Solve the inequality and write the solution set in interval notation.

a)  $5 - 7(x + 3) > 19x$

b)  $\frac{5-4x}{8} \geq 9$

c)  $\frac{-1}{2} \leq \frac{4-q}{2} < 3$