

Name \_\_\_\_\_

Date \_\_\_\_\_

HW - Word Problems #2

Math 8

1) A packager of tea leaves blends 3.5 pounds of Tea Leaf A with 1.5 pounds of Tea Leaf B to make a special blend. One pound of Tea Leaf B costs \$2 less than one pound of Tea Leaf A. The packager finds that the cost of making the blend is \$3 per pound. Find the cost of one pound of Tea Leaf B.

2) Alex is  $x$  years old. June is 7 years older than Alex. In 5 years, their total combined age will be 31 years.

a) Write a linear equation for their total combined age in 5 years.

b) Find June's present age.

3) Jane is  $x$  years old today. Her brother Kenny is 4 years older. After 7 years, their total combined ages will be 24 years.

a) Write a linear equation for their total combined age in 7 years.

b) Find Jane's age today.

4) Carter has 3 statues of various sizes in his garden. Statue A is one foot taller than Statue B. Statue C is one-half of a foot taller than Statue B.

a) Let  $x$  represent the height of Statue B. Write an equation to find the total combined height,  $h$ , of Statues A and C.

b) If the total combined height of the 3 statues is 10 feet, find the height of Statue B, in feet.

5) Alexis earns  $2\frac{1}{2}$  times as much as Gary in a day. James earns \$18 more than Gary in a day. If the total daily salary of all three people is \$306, find Alexis's salary.