Math 4 Homework #6

1. Present each number as a product of prime factors:

a). 126 = _____

b). 520 = _____

c). 192 = _____

d). 204 = _____

e). 108 = _____

f). 372 = _____

2.Calculate: 2 – 7 = _____ 2 – 7 – (–4) = _____

–1 – (–8) = _____ 12 – 7 – 4 = _____

–14 + 4 = _____ –2 – 7 – 4 = _____

3. Remove parenthesis (using the distributive law):

$(x + 7) =$ _____ $-1(3y - 1) =$ _____

$(x + 7) \cdot 2 =$ _____ $11(2t + 3) =$ _____

$3(x - 3) =$ _____ $7(3x - 2 + w) =$ _____

$5(18 - w) =$ _____ $-3(2y + 1 - 4x) =$ _____

$(x - y) \cdot -7 =$ _____ $4(4x - t + 3w) =$ _____

4. Plastic forks come in 16-packs; plastic knives come in 12-packs. What is the smallest number of packages of each kind you need to buy to get the same number of forks and knives?

5. Use a **drawing** to help you find an **equation** for the following word problem:

Four friends named Amanda, Bobby, Carl and Dan went out trick-or-treating. Amanda collected 50 more candies than Dan, Bobby collected 50 less candies than Dan, and Carl got 2 times more candies than Dan. When they put all candies in one jar, the number was 250. How many candies did each one collect?

6. Set $A = \{a, h, k, 4, 7, 9\}$, set $B = \{4, a, 9, l, p, 7\}$

Write the set $C = A \cap B$, and the set $D = A \cup B$

Draw a Venn Diagram for A and B, and label where C and D on the diagram