Name_____

SOLVING MULTI-STEP EQUATIONS W/THE DISTRIBUTIVE PROPERTY

BELL WORK

Which situation does NOT represent the equation $\frac{n}{2} = 12$?

a) Jim bought a box of cookies. He gave half of them to his brother. They each got 12 cookies. How many cookies were in the box Jim bought?

b) Lucy evenly divided her money from pet-sitting into two bank accounts. She put $12 in each account. How much did Lucy earn?

c) Kristy cut a piece of material into 12 pieces. Each piece was 2 in. How long was the piece of material to start with?

d) Laura had 2 more DVDs than her sister Emily. If Emily had 10 DVDs, how many DVDs did Laura have?

EXAMPLES: Solve each equation showing all steps.

1) $7(y + 3) = -28$ y = _____	2) $0 = -2(4x - 5)$ x = _____
3) $\dfrac{-3}{a-2} = \dfrac{-0.3}{3}$ a = _____	4) $-(8 - 2n) = 28$ n = _____

5) $\frac{1}{5}(13 - b) = \frac{18}{5}$ b = _____

6) $\frac{1}{2}(4p + 12) = 24$ p = _____

EXAMPLES: Write an equation for each situation and solve.

7) The length of a building is 2 times the sum of its width and 4. If the length of the building is 28 ft, find the width.

Equation:_____

8) An integer is 9 times the difference of twice a rational number and 3. If the integer is -35, what is the value of the rational number?

Equation:_____