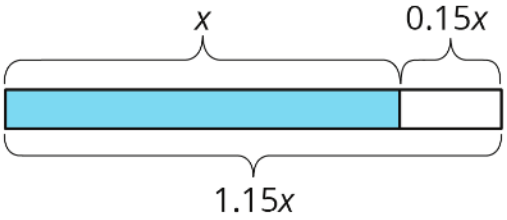
NAME DATE PERIOD

Lesson 8 Summary

We can use equations to express percent increase and percent decrease. For example, if y is 15% more than x,

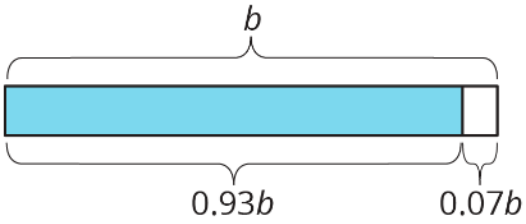


we can represent this using any of these equations:

$$y = x + 0.15x \qquad y = (1 + 0.15)x \qquad y = 1.15x$$

So if someone makes an investment of x dollars, and its value increases by 15% to \$1250, then we can write and solve the equation $1.15x = 1250$ to find the value of the initial investment.

Here is another example: if a is 7% less than b,



we can represent this using any of these equations:

$$a = b - 0.07b \qquad a = (1 - 0.07)b \qquad a = 0.93b$$

So if the amount of water in a tank decreased 7% from its starting value of b to its ending value of 348 gallons, then you can write $0.93b = 348$.

Often, an equation is the most efficient way to solve a problem involving percent increase or percent decrease.