**One-Step Equations**

Use ***inverse*** operations to solve equation.

 x + 3.2 = -8.5

 – 3.2 = – 3.2

x + 0 = – 11.7 🡪 x = – 11.7

***(Write and Solve One-Step Addition and Subtraction Equations)***

A scuba diver is exploring at an elevation of **– 12.2** meters. As the diver **rises** to the surface, she plans to stop and rest briefly at a reef that has an elevation of **– 4.55** meters. Find the **vertical** **distance** that the diver will travel.

**Step(1): Write an equation.**

**x = vertical distance between her initial elevation and the elevation of the reef**

 **– 12.2 + x = – 4.55**

**Step(2): Solve the equation using an *inverse* operation**

 **– 12.2 + x = – 4.55**

 **+12.2 +12.2**

 **0 + x = 7.65 🡪 x = 7.65**

 **The diver will travel a vertical distance of 7.65 meters.**

***(Writing and Solving One-Step Multiplication and Division Problems)***

The value of a share of stock **decreases** in value at a rate of **$1.20** ***per*** **hour** during the first **3.5** hours of trading. Write and solve an equation to find the decrease in the value of the share of stock during that time.

**Step(1): Write and equation.**

**x = the decrease in the value of the share of stock**

$\frac{x}{3.5} = -\$1.20$

**Step(2): Solve the equation using cross multiplication**

$\frac{x}{3.5} = -\$1.20 \rightarrow x = \left(3.5\right) \left(-\$1.20\right) \rightarrow x = -\$4.20$