**Two-Step Equations (Negative Numbers)**

Use **inverse** operation to solve equation.

– 9h – 15 = 93

+ 15 +15

– 9h + 0 = 108 🡪

Ex. 1 - An airplane flies at an altitude of **38,000** feet. As it nears the airport, the plane begins to **descend** at a rate of **600** feet per minute. At this rate, how many minutes will the plane take to **descend** to **18,800** feet?

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

**Let “m” represent the number of minutes**

**38,000 – 600m = 18,800**

**Step(2): Solve the equation. (\*\*\*ISOLATE THE TERM THAT CONTAINS THE VARIABLE\*\*\*)**

**38,000 – 600m = 18,800**

**– 38,000 – 38,000**

**0 – 600m = – 19,200 🡪**

**The plane will take 32 minutes to descend to 18,800 feet.**

Ex. 2 – Jenny earned **92** of a possible **120** points on a test. She **lost 4** points for each **incorrect** answer. How many **incorrect** answers did she have?

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

**Let “a” represent the number of incorrect answers**

**120 – 4a = 92**

**– 120 – 120**

**0 – 4a = – 28 🡪**

**There are 7 incorrect answers on Jenny’s test.**