NAME_____

Module 3 **Integers**
Lesson 5 **Solving Problems with Integers**

Guided Practice 3.5

Set 1

1. A swimming pool currently has 1,500 gallons of water in it and is filling at a rate of two gallons per hour. How many gallons will the pool hold in eight hours?

1500 + (2)(8)
1500 + 16
1516
1516 gallons in the pool

2. Find how many gallons of water there were three hours ago in a pool that currently hold seven gallons of water and is draining at a rate of 400 gallons per hour.

7 + (-400)(-3)
7 + 1200
1207
1207 gallons in the pool

Set 2

1. A hot air balloon is tied somewhere above ground to a platform labeled zero. Distance above the platform are given as positive integers. Distances below the platform are given as negative integers. The hot air balloon is descending at a rate of two units per hour. Where was it five hours ago?

(-5)(-2) = 10
10 units above the platform

2. A hot air balloon is tied somewhere above ground to a platform labeled zero. The balloon descends at a rate of four units per hour for two hours; then it ascends three units per hour for four hours. Where is it?

(-4)(2) + (+3)(4)
-8 + 12
4
4 units above the platform