Word Problem

Write the expression for each word problem, then solve.

Yoko and Sheila are digging a hole for a fence post. The bottom of their hole is currently 10 inches below the surface of the ground. Yoko digs the hole 5 inches deeper and Sheila digs the hole 8 inches deeper. What is the elevation (in inches) of the bottom of the hole after Sheila is finished?

-23

An elevator is stopped at a floor 20 feet below ground. It descends to another floor 65 feet below ground. What is the change in elevation of the elevator?

-45; change in elevation asks for whether it went up or down and this problem didn't ask about distance. Distance is not the same as change. You can have negative change and positive change.

Word Problem

A diver is 50 feet below sea level. She starts to rise to the surface for 12 feet, then decides to turn around and swim 3 feet to the bottom. What integer represents the diver's location relative to the sea level?
-50 + 12 + -3 = -41

Joey opens his checking account with $100, but he has to pay for $30 worth of school supplies. After paying for the supplies, he withdraws $40 to pay for sports uniforms. Joey does some chores for his parents and receives $12. His friends want to go to a movie so Joe pays for his movie ticket, drink, popcorn, and candy and $50 is debited from his account. How much money does Joe have?
100 + - 30 + - 40 + 12 + -50 = -8

These problems went in the journal entry for Absolute Value vs. Opposites.

What does the - sign mean again...

-(-5) = 5

-(3) = -3

-|- -2| = -|2| = -2

- - - 4 = -4

- (- 2) - - 1 = 2 + 1 = 3

3 - -2 = 3 + 2 = 5

-1 - (-4) = -1 + 4 = 3