

Pre-Algebra - Lesson 2-3 Problem-Solving Practice

Subtracting Integers

1. The diving board at Mike's pool is 3 feet above the water level. Mike stepped off the diving board and sank until his feet touched the bottom of the pool, which is 12 feet deep. How many feet did Mike descend from the diving board to the bottom of the pool?

2. During a 24-hour period, the high temperature was 18°F . The low temperature was -4°F . What was the temperature range for the day?

3. The American Kennel Club (AKC) is the largest and second oldest purebred dog registry in the world. The table below shows some breeds registered with the AKC. Describe the changes in the number of beagles and chihuahuas registered from 2003 to 2004.

Breed	2003	2004
Golden Retriever	52,520	52,520
Beagle	45,021	44,555
Dachshund	39,468	40,770
Poodle	32,162	32,671
Chihuahua	24,923	24,850
Siberian Husky	10,660	10,566

Source: American Kennel Club (AKC)

4. Jim and Tom played against each other in a golf tournament. Jim's final score was 6 under par, the average number of swings it should take a golfer to get his ball in the hole. Tom's score was 1 under par. Describe the outcome of their match.

5. An osprey was flying at an altitude of 80 feet above the ocean surface. The osprey spotted a fish and dove to a depth of 3 feet below the surface of the water to capture the fish. Once the osprey caught the fish, it ascended to a tree branch that was 25 feet above the ground. What was the change in altitude from where the osprey started to where it landed?

6. Refer to the information in Exercise 5. What was the total change in altitude, both up and down, of the osprey from first spotting the fish to landing on the branch?