Distance and Real-World Problems: Worked Answers

Each problem solved the way the lesson does it.

Name: _____ Date: _____

1. Find the distance between −2 and 7.
   - $|7 - (-2)| = |7 + 2| = |9|$.

   Answer: 9

2. Find the distance between −5 and −12.
   - $|-5 - (-12)| = |-5 + 12| = |7|$.

   Answer: 7

3. The temperature went from −4°F to 9°F. How much did it change?
   - End minus start: $9 - (-4) = 9 + 4$.

   Answer: 13 (it rose 13 degrees)

4. A score went from 50 to −10. What was the change?
   - End minus start: $-10 - 50$.

   Answer: −60 (it fell 60)

5. A diver is at −30 ft and a bird is at 15 ft. How far apart are they?
   - $|15 - (-30)| = |15 + 30| = |45|$.

   Answer: 45 ft

6. Which number is 4 to the left of −2? Write it as a sum.
   - Moving left is adding a negative: $-2 + (-4)$.

   Answer: −6

7. A bank balance is −$25. A deposit of $40 comes in. What is the new balance?
   - $-25 + 40$. $40 - 25 = 15$, positive.

   Answer: $15

8 From −8 to −3: how far, and up or down?

- Change: −3 − (−8) = −3 + 8 = 5. Positive, so up.

Answer: 5, up