Real-World Quotients: Worked Answers

Each problem solved the way the lesson does it.

Name: _____ Date: _____

1. Four friends share a $62.80 cost equally. What is each share?
   - −62.80 ÷ 4 = −15.70.

   Answer: −15.70 (each pays $15.70)

2. A submarine reaches −96 meters after 12 minutes at a steady rate. How far each minute?
   - −96 ÷ 12 = −8.

   Answer: −8 meters (8 meters down each minute)

3. The same submarine is at −140 meters. How many minutes has it been diving?
   - −140 ÷ (−8) = 17.5. Two negatives make a positive.

   Answer: 17.5 minutes

4. The temperature fell 21 degrees over 7 hours at a steady rate. Change each hour?
   - −21 ÷ 7 = −3.

   Answer: −3 degrees (3 degrees colder each hour)

5. A hiker is at −13.5 meters below the trailhead, going down 4.5 meters each hour. How long has she walked?
   - −13.5 ÷ (−4.5) = 3.

   Answer: 3 hours

6. A $960 debt is paid off in 6 equal payments. How does each payment change the balance owed?
   - −960 ÷ 6 = −160.

   Answer: −160 (each payment takes $160 off what you owe)

7 A pool drains 37.5 liters in 2.5 minutes at a steady rate. Change in liters each minute?

- −37.5 ÷ 2.5 = −15.

Answer: −15 liters (15 liters out each minute)

8 A stock lost $18.75 over 5 days, the same amount each day. Change each day?

- −18.75 ÷ 5 = −3.75.

Answer: −3.75 (it lost $3.75 each day)