Sharing the Prize: Worked Answers

Each problem solved the way the lesson does it.

Name: _____ Date: _____

1. A $60 prize is shared by three teams that sold 10, 20, and 30 tickets. How much does each team get?
   - Total: 60 tickets. Unit rate: $1 per ticket.
   - 10 × 1, 20 × 1, 30 × 1.

   Answer: $10, $20, and $30

2. A $200 prize is shared by three teams that scored 25, 15, and 10 points. How much does each team get?
   - Total: 50 points. Unit rate: $4 per point.
   - 25 × 4, 15 × 4, 10 × 4.

   Answer: $100, $60, and $40

3. A $150 prize is shared by three classes that collected 300, 450, and 750 box tops. How much does each class get?
   - Total: 1,500 box tops. Unit rate: $0.10 per box top.
   - 300 × 0.10, 450 × 0.10, 750 × 0.10.

   Answer: $30, $45, and $75

4. Mrs. Baca's class collected 2,301 of the 7,916 box tops. What is its share of the $600 prize, to the cent?
   - 2,301 over 7,916, times 600.
   - 2,301 × 600 = 1,380,600. Divide by 7,916 and round at the last step.

   Answer: $174.41

5. A $360 field trip cost is shared equally by 24 students. Write the quotient and say what it means.
   - −360 ÷ 24 = −15. A cost is negative.

   Answer: −15 (each student pays $15)

6 A team owes $840 for uniforms. 7 players split it equally. How does each player's balance change?

- −840 ÷ 7 = −120. A debt is negative.

Answer: −120 (each player owes $120)

7 Three friends share a $75 prize by hours worked: 2, 3, and 5 hours. How much does each get?

- Total: 10 hours. Unit rate: $7.50 per hour.
- 2 × 7.50, 3 × 7.50, 5 × 7.50.

Answer: $15, $22.50, and $37.50

8 Two schools share a $1,000 prize by cans collected: 1,250 and 3,750. How much does each school get?

- Total: 5,000 cans. Unit rate: $0.20 per can.
- 1,250 × 0.20, 3,750 × 0.20.

Answer: $250 and $750