Write equations with variables

Grade 3 Word Problems Worksheet

For each question, write an equation with a variable and then solve it.

1. Alex has a total of 16 shirts. There are 9 shirts in the closet and \( s \) shirts in the laundry basket.

2. There are 15 cars in the parking lot. After 3 cars left, there were \( c \) cars in the parking lots.

3. There are 5 basketball players playing at the court and \( b \) players sitting on the bench. There are total of 8 players in the team.

4. There were 14 muffins in the kitchen. After the children ate \( m \) muffins, there were 7 muffins left.

5. Tim has 3 older brothers and \( t \) younger sisters. Tim’s mother has 6 children.

6. Sara had \( q \) math questions to finish over the weekend. She finished 5 on Friday and 11 on Saturday. On Sunday, she had 8 questions left to do.
Answers

Note: there are several possible correct equations for each problem.

1. \[ 9 + s = 16 \]
   \[ s = 7 \]

2. \[ c = 15 - 3 \]
   \[ c = 12 \]

3. \[ 5 + b = 8 \]
   \[ b = 3 \]

4. \[ 14 - m = 7 \]
   \[ m = 7 \]

5. \[ 1 + 3 + t = 6 \]
   \[ t = 2 \]

6. \[ q - 5 - 11 = 8 \]
   \[ q = 24 \]