

Performance Task: 7.11A
Equations and Inequalities: Marla's Picture Puzzle

Marla saw a picture puzzle posted on her social media feed. She noticed that many people solved the puzzle and got different answers. After she solved the puzzle, she decided to create one of her own and do a survey with her friends to see how many of her friends could get the correct answer. Her puzzle is shown below.

$$2 \text{ squirrel} + 7 + \text{ squirrel} = 61$$

$$\text{ squirrel} \times 2 \text{ dog} + 8 = 80$$

$$2 \text{ cat} - \text{ dog} = 10$$

$$\text{ squirrel} + \text{ dog} \div \text{ cat} = ?$$

1. Using a variable letter to represent a squirrel, what equation can be used to solve the first line of the puzzle?
2. What is the value of a squirrel in the puzzle?
3. Using a variable letter to represent a dog, what equation can be used to solve the second line of the puzzle?
4. What is the value of a dog in the puzzle?
5. Using a variable letter to represent a cat, what equation can be used to solve the third line of the puzzle?
6. What is the value of a cat in the puzzle?
7. What is the answer to the last line of the puzzle based on the values for each animal?

