**Lower Elementary:**

*Question:* Annie buys a chocolate bar with two quarters. She gets a nickel in change. How much does the chocolate bar cost?

**Upper Elementary:**

*Question:* Paolo takes a plane from Vancouver to Toronto. The plane takes off at 8:30 in the morning and lands 5 hours and 48 minutes later. Toronto is 3 time zones (3 hours) ahead of Vancouver. What time does the plane land in Toronto?

**Middle School:**

*Question:* Match the following hints on the left with the shapes on the right so each clue is only used once. Note: there are multiple correct answers.



**Algebra and Up:**

*Question:* A van is embarking on a 500 kilometre road trip. Fill in the table with possible average speeds and amounts of time it’ll take for the van to travel that distance. Then, plot the points on the graph to the right.



**Lower Elementary:**

*Question:* Annie buys a chocolate bar with two quarters. She gets a nickel in change. How much does the chocolate bar cost?

*Answer:* 45¢

*Solution:* Two quarters are worth 25 + 25 = 50¢. Since Annie gets a nickel—5¢—back in change, that means that the chocolate bar is worth 5¢ less than 50¢. So, the chocolate bar is worth 50 – 5 = 45¢.

**Upper Elementary:**

*Question:* Paolo takes a plane from Vancouver to Toronto. The plane takes off at 8:30 in the morning and lands 5 hours and 48 minutes later. Toronto is 3 time zones (3 hours) ahead of Vancouver. What time does the plane land in Toronto?

*Answer:* 5:18 pm

*Solution:* The time in Toronto will be 5 hours and 48 minutes + 3 hours = 8 hours and 40 minutes after 8:30 am. Eight hours after 8:30 am is 4:30 pm, and 48 minutes after that is 5:18 pm.

**Middle School:**

*Question:* Match the following hints on the left with the shapes on the right so each clue is only used once. Note: there are multiple correct answers.



*Answer:* Answers will vary (Possible solution: V, III, II, I, IV)

*Solution:* One way to solve this problem is to list all of the possible answers for each clue, then eliminate answers that are already used for each. The only options for clue III is the rhombus, and the only option for IV is the trapezoid. So, those shapes can be eliminated from other clues. By following this process, one possible answer we can get is that the square fits V, the rhombus fits III, the kite fits II, the rectangle fits I, and the trapezoid fits IV.

**Algebra and Up:**

*Question:* A van is embarking on a 500 kilometre road trip. Fill in the table with possible average speeds and amounts of time it’ll take for the van to travel that distance. Then, plot the points on the graph to the right.



*Answer:* 

*Solution:* The average speed multiplied by the amount of time must equal 500 kilometres. We can fill in the table by finding the missing number that makes either the time or speed multiply to 500.