**Lower Elementary:**

*Question:* John has 8 quarters. He buys a bottle of pop and gets 6 dimes in change. How much does the pop cost?

**Upper Elementary:**

*Question:* Mila has ¾ of a pound of caramels. Nora has 0.2 pounds of caramels. How much do their caramels weigh altogether?

**Middle School:**

*Question:* Lucas has an average score of 40 points on his five history quizzes. He scored 35, 44, 41, and 38 on the first four quizzes. How many points did he score on the last quiz?

**Algebra and Up:**

*Question:* You roll two six-sided dice and add their values together. What is the probability of rolling a prime number?

**Lower Elementary:**

*Question:* John has 8 quarters. He buys a bottle of pop and gets 6 dimes in change. How much does the pop cost?

*Answer:* $1.40

*Solution:* Each quarter is worth 25¢, so 8 quarters are worth 200¢, or $2.00. Each dime is worth 10¢, so 6 of them are worth 60¢. The bottle of pop costs the difference between the amount John pays and the amount of change he gets, so the pop is worth $2.00 – $0.60 = $1.40.

**Upper Elementary:**

*Question:* Mila has ¾ of a pound of caramels. Nora has 0.2 pounds of caramels. How much do their caramels weigh altogether?

*Answer:* 0.95 pounds

*Solution:* One way to do this problem is to convert ¾ into a decimal in order to add it to the other decimal. Mila has ¾ = 0.75. Since 0.75 + 0.2 = 0.95, Nora and Mila have 0.95 pounds of caramels altogether.

**Middle School:**

*Question:* Lucas has an average score of 40 points on his five history quizzes. He scored 35, 44, 41, and 38 on the first four quizzes. How many points did he score on the last quiz?

*Answer:* 42 points

*Solution:* Because there are five quizzes in total and Lucas scored an average of 40 points, he must have scored a total of 200 points because 40 × 5 = 200. He scored a total of 35 + 44 + 41 + 38 = 158 points on the first four quizzes, so he must have scored 200 – 158 = 42 points on the last quiz.

**Algebra and Up:**

*Question:* You roll two six-sided dice and add their values together. What is the probability of rolling a prime number?

*Answer:* 5 out of 12

*Solution:* To roll a prime, you’d need to roll a 2, 3, 5, 7, or 11. There is one way to roll a 2, two ways to roll a 3, four ways to roll a 5, six ways to roll a 7, and two ways to roll an 11. So, there are 15 total ways to roll a prime. There are 6 sides on a die, so 6 × 6 = 36 possible outcomes when you roll two dice. That means the probability of rolling a prime is 15 out of 36, which reduces to 5 out of 12.