**Lower Elementary:**

*Question:* In Mrs. Olson’s first grade class, math lessons start at 1:05 pm and end 65 minutes later. At what time are Mrs. Olson’s math lessons over?

**Upper Elementary:**

*Question:* Matthew learns in history class that the first presidential election in the United States happened in 1789, the second happened in 1792, and the rest have happened every 4 years since then. The most recent election was in 2016. How many presidential elections have happened in the United States in total?

**Middle School:**

*Question:* Jack’s science homework is to measure the temperature outside at 7 pm each day for a week. On Monday, his thermometer reads 77°F, but his homework asks for the temperature in Celsius. Since the temperature in Celsius is equal to five-ninths of the quantity 32 less than the temperature in Fahrenheit, what should Jack write down on his homework?

**Algebra and Up:**

*Question:* One half of Hailey’s overall English grade comes from test scores. One fifth of her grade comes from quizzes. Another fifth comes from homework. The rest comes from classroom participation. If Hailey has an average test score of 92%, an average quiz score of 80%, an average homework score of 75%, and a classroom participation score of 100%, what is her overall grade as a percentage?

**Lower Elementary:**

*Question:* In Mrs. Olson’s first grade class, math lessons start at 1:05 pm and end 65 minutes later. At what time are Mrs. Olson’s math lessons over?

*Answer:* 2:10 pm

*Solution:* Since 60 minutes is an hour, 65 minutes is 1 hour and 5 minutes. One hour after 1:05 pm is 2:05 pm, and 5 minutes after that is 2:10 pm.

**Upper Elementary:**

*Question:* Matthew learns in history class that the first presidential election in the United States happened in 1789, the second happened in 1792, and the rest have happened every 4 years since then. The most recent election was in 2016. How many presidential elections have happened in the United States in total?

*Answer:* 58 presidential elections

*Solution:* First, we subtract 1792 from 2016 to find that it’s been 224 years since the second presidential election. Next, we divide 224 by 4 to find that there have been 56 election cycles since 1792. Finally, we add 2 elections for the 1st and 2nd presidential elections that we haven’t counted so far for a total of 58 presidential elections.

**Middle School:**

*Question:* Jack’s science homework is to measure the temperature outside at 7 pm each day for a week. On Monday, his thermometer reads 77°F, but his homework asks for the temperature in Celsius. Since the temperature in Celsius is equal to five-ninths of the quantity 32 less than the temperature in Fahrenheit, what should Jack write down on his homework?

*Answer:* 25°C

*Solution:* We need to find five-ninths of 32 less than 77. First, we subtract 32 from 77 to get 45. Next, we find five-ninths of 45. Since one-ninth of 45 is 5, five-ninths of 45 is 5 × 5 = 25. So, Jack should write down 25°C on his homework.

**Algebra and Up:**

*Question:* One half of Hailey’s overall English grade comes from test scores. One fifth of her grade comes from quizzes. Another fifth comes from homework. The rest comes from classroom participation. If Hailey has an average test score of 92%, an average quiz score of 80%, an average homework score of 75%, and a classroom participation score of 100%, what is her overall grade as a percentage?

*Answer:* 87%

*Solution:* To answer this question, we multiply each of Hailey’s average scores by the fractional part of her score represented by that category, then we add it all together. So:

0.5 × 0.92 + 0.2 × 0.75 + 0.2 × 0.8 + 0.1 × 1 = 0.46 + 0.15 + 0.16 + 0.1 = 0.87 = 87%