**Lower Elementary:**

*Question:* If a black sheep gives 22 ounces of wool to his master, 23 ounces to his dame, and 19 ounces to the little boy who lives down the lane, then how many ounces of wool does the black sheep give away in total?

**Upper Elementary:**

*Question:* A little pig builds a brick house that is 10⅔ feet wide and 12⅔ feet long. What is the perimeter of the little pig’s house?

**Middle School:**

*Question:* Jack casts an 8’ shadow. If Jack is 5’ tall, then how tall is a bean stalk that casts a 1,600’ shadow?

**Algebra and Up:**

*Question:* A tortoise and a hare begin a 4–mile race at the same time. The tortoise travels 2 miles per hour, and the hare travels 24 miles per hour. After the hare races for 8 minutes, he stops to take a nap. The tortoise passes the hare and wins the race. How much time does it take for the tortoise to reach the finish line after it passes the hare?

**Lower Elementary:**

*Question:* If a black sheep gives 22 ounces of wool to his master, 23 ounces to his dame, and 19 ounces to the little boy who lives down the lane, then how many ounces of wool does the black sheep give away in total?

*Answer:* 64 ounces

*Solution:* To find the total number of ounces of wool, we add 22 + 23 = 45 ounces, + 19 = 64 ounces.

**Upper Elementary:**

*Question:* A little pig builds a brick house that is 10⅔ feet wide and 12⅔ feet long. What is the perimeter of the little pig’s house?

*Answer:* 46⅔ feet

*Solution:* First, we can add together the two shorter sides: 10⅔ + 10⅔ = 21⅓ feet. Next, we add the two longer sides: 12⅔ + 12⅔ = 25⅓. Now, if we add the short sides and the long sides together, we’ll have the whole perimeter: 21⅓ + 25⅓ = 46⅔ feet.

**Middle School:**

*Question:* Jack casts an 8’ shadow. If Jack is 5’ tall, then how tall is a bean stalk that casts a 1,600’ shadow?

*Answer:* 1,000 feet

*Solution:* Jack is five-eighths of his shadow’s length. So, the bean stalk’s height will be five-eighths of its shadow’s length. One eighth of 1,600 feet is 200 feet, so five eighths of 1,600 feet is 200 × 5 = 1,000 feet.

**Algebra and Up:**

*Question:* A tortoise and a hare begin a 4–mile race at the same time. The tortoise travels 2 miles per hour, and the hare travels 24 miles per hour. After the hare races for 8 minutes, he stops to take a nap. The tortoise passes the hare and wins the race. How much time does it take for the tortoise to reach the finish line after it passes the hare?

*Answer:* 24 minutes

*Solution:* First, we need to know how far the hare gets in 8 minutes (or 2/15 of an hour): 24 mph × 2/15 hr = 16/5 miles. That means that there are 4/5 of a mile left to go for the tortoise after it passes the hare. To find the amount of time, we solve for ***t***: 4/5 of a mile = 2 mph × ***t***, so ***t*** = 2/5 of an hour, or 24 minutes.