**Lower Elementary:**

*Question:* If a black sheep gives 620 grams of wool to his master, 670 grams to his dame, and 710 grams to the little boy who lives down the lane, then how many grams of wool does the black sheep give away in total?

**Upper Elementary:**

*Question:* A little pig builds a brick house that is 3½ metres wide and 4½ metres long. What is the perimeter of the little pig’s house?

**Middle School:**

*Question:* Jack casts a 24 dm shadow. If Jack is 15 dm tall, then how tall is a bean stalk that casts a 4800 dm shadow?

**Algebra and Up:**

*Question:* A tortoise and a hare begin a six kilometre race at the same time. The tortoise travels 3 km per hour, and the hare travels 36 km per hour. After the hare races for eight minutes, he stops to take a nap. The tortoise passes the turtle 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 620 grams of wool to his master, 670 grams to his dame, and 710 grams to the little boy who lives down the lane, then how many grams of wool does the black sheep give away in total?

*Answer:* 2000 grams

*Solution:* To find the total number of grams of wool, we add 620 + 670 = 1290 grams, + 710 = 2000 grams.

**Upper Elementary:**

*Question:* A little pig builds a brick house that is 3½ metres wide and 4½ metres long. What is the perimeter of the little pig’s house?

*Answer:* 16 metres

*Solution:* First, we can add together the two shorter sides: 3½ + 3½ = 7 metres. Next, we add the two longer sides: 4½ + 4½ = 9. Now, if we add the short sides and the long sides together, we’ll have the whole perimeter: 7 + 9 = 16 metres.

**Middle School:**

*Question:* Jack casts a 24 dm shadow. If Jack is 15 dm tall, then how tall is a bean stalk that casts a 4800 dm shadow?

*Answer:* 3000 decimetres

*Solution:* Jack is five-eighths of his shadow’s height. So, the bean stalk will be five-eighths of its shadow’s height. One eighth of 4800 decimetres is 600 decimetres, so five eighths of 4800 decimetres is 600 × 5 = 3000 decimetres.

**Algebra and Up:**

*Question:* A tortoise and a hare begin a six kilometre race at the same time. The tortoise travels 3 km per hour, and the hare travels 36 km per hour. After the hare races for eight minutes, he stops to take a nap. The tortoise passes the turtle 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 eight minutes (or 2/15 of an hour): 36 km/h × 2/15 hr = 24/5 kilometres. That means that there are 6/5 of a kilometre left to go for the tortoise after it passes the hare. To find the amount of time, we solve for ***t***: 6/5 of a kilometre = 3 km/h × ***t***, so ***t*** = 2/5 of an hour, or 24 minutes.