**Lower Elementary:**

*Question:* Chloe had an excellent fishing day. She caught 6 snappers, 4 mackerels, 1 grouper, and 1 soggy boot. She threw half the snappers and half the mackerels back into the ocean. How many fish did she take home?

**Upper Elementary:**

*Question:* Landon goes to a theme park where ride tokens cost 25¢. A roller coaster ride takes 3 tokens. A ride on the Ferris wheel takes 5 tokens. Landon rides the roller coaster and the Ferris wheel 7 times each. How much money did Landon spend on rides?

**Middle School:**

*Question:* A hamster and a guinea pig are running on wheels. The hamster’s wheel is 6 inches in diameter. The guinea pig’s wheel is 18 inches in diameter. How much farther does the guinea pig run for each rotation of its wheel?

**Algebra and Up:**

*Question:* It costs $20.00 to rent a jet ski, plus $1.50 for each hour of use, plus the cost of gas. James rents a jet ski for 2 hours. He uses 3 quarts of gas, which costs $2.98 per gallon. How much did the jet ski rental cost altogether?

**Lower Elementary:**

*Question:* Chloe had an excellent fishing day. She caught 6 snappers, 4 mackerels, 1 grouper, and 1 soggy boot. She threw half the snappers and half the mackerels back into the ocean. How many fish did she take home?

*Answer:* 6 fish

*Solution:* Chloe caught 6 + 4 + 1 = 11 fish in total. She threw 3 snappers back because half of 6 is 3, and she also threw 2 mackerels back because half of 4 is 2. That means she went home with 11 – 3 – 2 = 6 fish.

**Upper Elementary:**

*Question:* Landon goes to a theme park where ride tokens cost 25¢. A roller coaster ride takes 3 tokens. A ride on the Ferris wheel takes 5 tokens. Landon rides the roller coaster and the Ferris wheel 7 times each. How much money did Landon spend on rides?

*Answer:* $14.00

*Solution:* Three tokens for the roller coaster cost 25¢ × 3 = 75¢. Five tokens for the Ferris wheel cost 25¢ × 5 = $1.25. The total cost for 7 rides on the roller coaster cost $0.75 × 7 = $5.25, and 7 rides on the Ferris wheel cost $1.25 × 7 = $8.75. So, Landon spent $5.25 + $8.75 = $14.00 on rides.

**Middle School:**

*Question:* A hamster and a guinea pig are running on wheels. The hamster’s wheel is 6 inches in diameter. The guinea pig’s wheel is 18 inches in diameter. How much farther does the guinea pig run for each rotation of its wheel?

*Answer:* 12π inches

*Solution:* The formula we use to find the circumference of a circle is ***C*** = π***d***, ***d*** being the diameter of the circle. The hamster runs π × 6 = 6π inches. The guinea pig runs π × 18 = 18π. So, the guinea pig runs 18π – 6π = 12π inches farther than the hamster.

**Algebra and Up:**

*Question:* It costs $20.00 to rent a jet ski, plus $1.50 for each hour of use, plus the cost of gas. James rents a jet ski for 2 hours. He uses 3 quarts of gas, which costs $2.98 per gallon. How much did the jet ski rental cost altogether?

*Answer:* $25.24

*Solution:* To find the price of the rentals, we can use the expression ***C*** = $20.00 + $1.50***t*** + $2.98***g*** wherein ***C*** is the total cost of the rental, ***t*** is the number of hours spent with the jet skis, and ***g*** is the gallons of gas used. James rented 1 jet ski for 2 hours and used 0.75 gallons of gas, so he spent $20.00 + $1.50 × 2 + $2.98 × 0.75 = $25.24 after rounding.