**Lower Elementary:**

*Question:* A bakery is having a half-price sale on donuts. A half-dozen donuts are only $3.00! How much do a dozen donuts cost at their regular price?

**Upper Elementary:**

*Question:* Eric has $31.00 to spend on groceries. He has 4 boxes of cookies that cost $2.85 each and a half-gallon of milk that costs $3.50 in his cart already. How much money does Eric have left to spend on his other groceries?

**Middle School:**

*Question:*  Russell’s new diesel car gets 41 miles per gallon. He wants to take a road trip from Los Angeles to Dallas, a distance of 1,435 miles. The average price of diesel for the whole trip is $3.73 per gallon. How much will the fuel cost for the whole trip, there and back?

**Algebra and Up:**

*Question:* Shiv has two fish tanks. One is shaped like a rectangular prism that measures 25 inches long by 10 inches wide by 15 inches high. The other tank is shaped like a cylinder with a 10-inch radius and a 12-inch height. Which tank can hold the most water? How much more water can it hold than the other tank? (Round π to 3.14)

**Lower Elementary:**

*Question:* A bakery is having a half-price sale on donuts. A half-dozen donuts are only $3.00! How much do a dozen donuts cost at their regular price?

*Answer:* $12.00

*Solution:* If something is on sale for half price, the sale price is half of the regular price. Since a half-dozen donuts cost $3.00 on sale, we can double $3.00 to find the regular price. $3.00 doubled is $6.00.

Two half-dozens equal one dozen. Since a half-dozen donuts cost $6.00 at regular price, a dozen donuts cost $6.00 + $6.00 = $12.00 at regular price.

**Upper Elementary:**

*Question:* Eric has $31.00 to spend on groceries. He has 4 boxes of cookies that cost $2.85 each and a half-gallon of milk that costs $3.50 in his cart already. How much money does Eric have left to spend on his other groceries?

*Answer:* $16.10

*Solution:* The 4 boxes of cookies cost 4 × $2.85 = $11.40. The cookies plus the milk cost $11.40 + $3.50 = $14.90. Subtracting $14.90 from $31.00, we get $16.10.

**Middle School:**

*Question:*  Russell’s new diesel car gets 41 miles per gallon. He wants to take a road trip from Los Angeles to Dallas, a distance of 1,435 miles. The average price of diesel for the whole trip is $3.73 per gallon. How much will the fuel cost for the whole trip, there and back?

*Answer:* $261.10

*Solution:* The round trip is 1,435 × 2 = 2,870 miles. Russell’s car gets 41 miles per gallon, so he needs 2,870 miles ÷ 41 mpg = 70 gallons of fuel for the whole trip. The average price of diesel is $3.73 per gallon. The cost for fuel for the whole trip is $3.73 × 70 = $261.10.

**Algebra and Up:**

*Question:* Shiv has two fish tanks. One is shaped like a rectangular prism that measures 25 inches long by 10 inches wide by 15 inches high. The other tank is shaped like a cylinder with a 10-inch radius and a 12-inch height. Which tank can hold the most water? How much more water can it hold than the other tank? (Round π to 3.14)

*Answer:* The cylindrical tank holds 18 in3 more water than the rectangular prism.

*Solution:* The volume of the rectangular prism tank is 25 in × 10 in × 15 in = 3,750 in3.

The volume of the cylindrical tank is (3.14)(10)2(12) ≈ 3,768 in3.

The cylindrical tank holds 3,768 − 3,750 = 18 in3 more water than the rectangular prism tank.