**Lower Elementary:**

*Question:* Lauren has $1.00 in coins. She has 1 quarter, 3 dimes, and the rest are nickels. How many nickels does Lauren have?

**Upper Elementary:**

*Question:* A local scout troop is hosting a fundraising talent show. They sold child tickets for $5.00 each and adult tickets for $10.00 each. They made $400.00. If they sold 12 adult tickets, how many child tickets did they sell?

**Middle School:**

*Question:*  Three kilograms of dog food is enough to feed 8 dogs for a day. Exactly how many kilograms of dog food are needed for 18 dogs?

**Algebra and Up:**

*Question:* James can paint a fence in 2 hours. Jessie can paint a fence in 3 hours. How long will it take them to paint a fence together?

**Lower Elementary:**

*Question:* Lauren has $1.00 in coins. She has 1 quarter, 3 dimes, and the rest are nickels. How many nickels does Lauren have?

*Answer:* 9 nickels

*Solution:* Since a quarter is worth 25¢ and a dime is worth 10¢, Lauren has 25¢ + 10¢ + 10¢ + 10¢ = 55¢. Since she has $1.00 worth of coins, that means she has 100¢ – 55¢ = 45¢ in nickels. It takes 9 nickels to make 45¢. So, Lauren has 9 nickels.

**Upper Elementary:**

*Question:* A local scout troop is hosting a fundraising talent show. They sold child tickets for $5.00 each and adult tickets for $10.00 each. They made $400.00. If they sold 12 adult tickets, how many child tickets did they sell?

*Answer:* 56 tickets

*Solution:* The scout troop made $10.00 × 12 = $120.00. Since they made a total of $400.00, they made $400.00 – $120.00 = $280.00 from the sale of child tickets. Since they sold child tickets for $5.00 each, the number of child tickets they sold was $280.00 ÷ $5.00 = 56 tickets.

**Middle School:**

*Question:*  Three kilograms of dog food is enough to feed 8 dogs for a day. Exactly how many kilograms of dog food are needed for 18 dogs?

*Answer:* 63/4 kilograms of food

*Solution:* Since 3 kilograms of dog food is enough to be divided among 8 dogs, each dog eats 3/8 of a kilogram of dog food. So, 18 dogs will need 3/8 × 18 = 54/8 = 63/4 kilograms of food.

**Algebra and Up:**

*Question:* James can paint a fence in 2 hours. Jessie can paint a fence in 3 hours. How long will it take them to paint a fence together?

*Answer:* 1 hour and 12 minutes

*Solution:* James can paint 1 fence in 2 hours, so his rate is 1 fence/2 hours. Jessie can paint 1 fence in 3 hours, so her rate is 1 fence/3 hours. If we add their rates together, we get the rate at which they can paint a fence if they work together: 1 fence/2 hours + 1 fence/3 hours = 1 fence/***x*** hours. If we solve for ***x***, we get ***x*** = 6/5 = 11/5. So, James and Jessie can paint a fence together in 11/5 hours, or 1 hour and 12 minutes.