Juliet bought 10 beads for $18. The beads she bought are red, blue or silver. Red beads are $1 each, blue beads are $2 each and silver beads are $5 each. If she bought at least one of each, how many red beads did she buy?
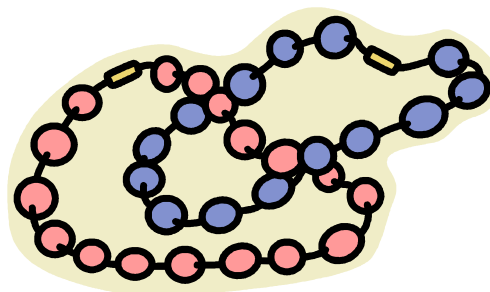
Solution: 5 red beads.

If Julie bought 2 silver beads, she would only have $8 left to purchase 8 more beads. In that case, she would not be able to buy any blue beads. So, Julie can only purchase 1 silver bead.

That leaves her $18-$5=$13 for 10-1= 9 beads (in red or blue). We will use guess and check to find the number of blue beads and red beads she bought.

Guess #1: 3 red beads and 6 blue beads

Check: the cost is $3 + $12 = $15 > $13. Since a red bead costs less than a blue bead, we need to increase the guess on the number of red beads.

Guess #2: 6 red beads and 3 blue beads

Check: the cost is $6 + $6 = $12 < $13. Since a red bead costs less than a blue bead, we need to decrease the guess on the number of red beads.

Guess #3: 5 red beads and 4 blue beads

Check: the cost is $5 + $8 = $13. That's it! This is the answer we are looking for.

Therefore, Julie bought 1 silver bead, 4 blue beads, and 5 red beads.