

1. A fourth of a stick is painted red, $\frac{2}{3}$ is painted blue, and the remaining 2 feet is unpainted. How long is the entire stick?

24 feet. $\frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$. The remaining $\frac{1}{12}$ of the stick is 2 feet. Therefore, the entire stick is 24 ft. long.

2. Martha multiplied her age by 6, added 10, divided by 2, and then subtracted 3 times her age. What number was Martha left with?

5. Choose any age, say 20. $20 \times 6 = 120$; $120 + 10 = 130$. $130 \div 2 = 65$; $65 - 3(20) = 65 - 60 = 5$.

3. One-fourth of the Smith family are female children. One-half of the Smith family are male children. Including Mr. and Mrs. Smith, there are _____ people in the Smith family.

8. The number of people in the Smith family is divisible by 4 ($\frac{1}{4}$ are girls). The Smith family has 2 girls and 4 boys, totaling 6 children and 2 adults. $\frac{2}{8} = \frac{1}{4}$ and $\frac{4}{8} = \frac{1}{2}$.