

1. Lily scores 15 points fewer than Bob, who scores 35 points. Carol scores half as many points as Lily. How many points does Carol score? Write an expression and solve it.

$$B = 35$$

$$L = 35 - 15$$

$$C = \frac{35 - 15}{2}$$

$$\frac{35 - 15}{2} \text{ OR } \frac{(35 - 15) \div 2}{20 \div 2}$$
$$= \frac{20}{2}$$
$$\boxed{= 10}$$
$$\boxed{= 10}$$

2. Ethan has a cup filled with red, blue and green marbles. He has 10 red marbles and there are twice as many blue marbles as red. The number of green marbles is three less than the number of blue marbles. Write an expression for the total number of marbles and solve it.

$$\text{Total } R + B + G$$

$$R: 10$$

$$B: 10 \cdot 2$$

$$G: (10 \cdot 2) - 3$$

$$10 + (10 \cdot 2) + [(10 \cdot 2) - 3]$$

$$10 + 20 + [20 - 3]$$

$$\underline{10 + 20} + 17$$

$$30 + 17$$

$$\boxed{= 47}$$

4. Logan is calculating how much money he will have for the holidays, 10 weeks from now. He starts by making a list of what he will earn and what he will spend between now and then. Here is his list:

- He currently has \$450
- He will earn \$120⁺ a week for delivering pizzas
- He needs to spend \$25 per week on gas for his car
- He gives himself an allowance of \$30⁺ per week

Calculate how much money he will have after 10 weeks.

$$450 + (120 \cdot 10) - (25 \cdot 10) + (30 \cdot 10)$$

$$\underline{450 + 1200 - 250 + 300}$$

$$\underline{1650 - 250 + 300}$$

$$\underline{1400 + 300}$$

$$\boxed{\$1700}$$

Logan will have \$1700 in his account after 10 weeks.

5. Chloe got \$275 on her birthday. She went to the mall and bought the following items:

- 5 lip gloss for \$4 each
- 3 pair of jeans for \$30 each
- 3 long sleeve tops for \$19 each
- 1 pair of boots for \$95

Write an expression and calculate the amount Chloe has left over after making her purchases.

$$275 - [(5 \cdot 4) + (3 \cdot 30) + (3 \cdot 19) + 95]$$

$$275 - [20 + 90 + 57 + 95]$$

$$\begin{array}{r} 275 - 262 \\ \hline \boxed{= 13} \end{array}$$