

Evaluate Addition and Subtraction Expressions

Follow these steps to evaluate an algebraic expression.

- Replace each variable with a given number.
- Compute to find the value of the expression.

Evaluate $10 - x$ when $x = 8$.

$$10 - x \quad \leftarrow \text{Replace } x \text{ with } 8.$$

$$10 - 8 \quad \leftarrow \text{Subtract.}$$

$$\boxed{2} \quad \leftarrow \text{value of expression}$$

Evaluate $75 + s + t$ when $s = 2$ and $t = 5$.

$$75 + s + t \quad \leftarrow \text{Replace } s \text{ with } 2 \text{ and } t \text{ with } 5.$$

$$75 + 2 + 5 \quad \leftarrow \text{Add.}$$

$$\boxed{82} \quad \leftarrow \text{value of expression}$$

MORE PRACTICE

Evaluate each expression.

1. $6.05 + m$, when $m = 12.68$

$$6.05 + 12.68 = 18.73$$

3. $g + 52,819$, when $g = 975$

$$975 + 52,819 = 53,794$$

5. $y + 8.06$, when $y = 12.95$

$$12.95 + 8.06 = 21.01$$

2. $h - 146$, when $h = 293$

$$293 - 146 = 147$$

4. $17.03 - k$, when $k = 2.2$

$$17.03 - 2.2 = 14.83$$

6. $n - 42.41$, when $n = 50$

$$50.00 - 42.41 = 7.59$$

Find the value of each algebraic expression when $p = 2.9$ and $q = 7.05$.
Work from left to right and start with the first addition or subtraction.

7. $4 + p + q$

$$4 + 2.9 + 7.05 = 13.95$$

8. $95 - p - q$

$$95 - 2.9 - 7.05 = 85.05$$

9. $p + 191 + q$

$$2.9 + 191 + 7.05 = 200.95$$

10. $q + 7.1 + p$

$$7.05 + 7.1 + 2.9 = 17.05$$

11. $p + 82.3 - q$

$$2.9 + 82.3 - 7.05 = 78.15$$

12. $q + 3.57 - p$

$$7.05 + 3.57 - 2.9 = 7.72$$

13. Emily has $h + 15$ minutes of homework tonight. Evaluate when $h = 20$.

$$20 + 15 = \boxed{35 \text{ minutes}}$$