

Practice

Answer Key

Lessons 3.5 and 3.6

Evaluate each variable expression.

- ① P
- ② E
- ③ MP →
- ④ AS →

1. $9x + 2$ when $x = 6$

$$\begin{array}{r} 9 \cdot 6 + 2 \\ 54 + 2 \\ \hline 56 \end{array}$$

2. $4x^2 + y$ when $y = 3$

$$\begin{array}{r} 4 \cdot (3)^2 + 3 \\ 4 \cdot 9 + 3 \\ 36 + 3 \\ \hline 39 \end{array}$$

3. $3(12 - z)$ when $z = 7$

$$\begin{array}{r} 3(12 - 7) \\ 3 \cdot 5 \\ \hline 15 \end{array}$$

4. $8(4 + n^2)$ when $n = 2$

$$\begin{array}{r} 8(4 + 2^2) \\ 8(4 + 4) \\ 8 \cdot 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 8(4 + 2^2) \\ 8(4 + 4) \\ 8(8) \\ \hline 64 \end{array}$$

5. $32 \div 4x$ when $x = 2$

$$\begin{array}{r} 32 \div 4 \cdot 2 \\ 8 \cdot 2 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 32 \div 4(2) \\ 8(2) \\ \hline 16 \end{array}$$

$$\begin{array}{r} 5^2 - 4(5) \\ 25 - 4(5) \\ 25 - 20 \\ \hline 5 \end{array}$$

6. $b^2 - 4b$ when $b = 5$

$$\begin{array}{r} 5^2 - 4 \cdot 5 \\ 25 - 4 \cdot 5 \\ 25 - 20 \\ \hline 5 \end{array}$$

7. $c^2 - c$ when $c = 7$

$$\begin{array}{r} 7^2 - 7 \\ 49 - 7 \\ \hline 42 \end{array}$$

8. $12(d + 2)$ when $d = 4$

$$\begin{array}{r} 12(4 + 2) \\ 12 \cdot 6 \\ \hline 72 \end{array}$$

9. $g^2 + 2g + 3$ when $g = 4$

$$\begin{array}{r} 4^2 + 2(4) + 3 \\ 16 + 8 + 3 \\ \hline 24 + 3 \\ \hline 27 \end{array}$$

10. $n^2 + 3n - 5$ when $n = 6$

$$\begin{array}{r} 6^2 + 3 \cdot 6 - 5 \\ 36 + 3 \cdot 6 - 5 \\ 36 + 18 - 5 \\ \hline 54 - 5 \\ \hline 49 \end{array}$$