

Evaluate the expression for the given value of the variable.

1. $x - 7; x = 3$

$$1. \underline{x} - 7 : \underline{x} = \underline{3}$$

$$(x) + (-7)$$

$$(3) + (-7)$$

$$-4$$

$$2x$$

↑
Coe

$$-1x$$

$$(+)(+) = (+)$$

$$(-)(-) = (+)$$

$$(+)(-) = (-)$$

$$(-)(+) = (-)$$

2. $|2x + 5|; x = -4$

$$2. |2x + 5| : \underline{x = -4}$$

$$| \underline{2(-4)} + 5 |$$

$$| \underline{(-8)} + 5 |$$

$$\underline{| -3 |}$$

$$3$$

3. $-x + 9; x = 5.5$

$$3. -x + 9 : x = \underline{5.5}$$

$$-(5.5) + 9$$

$$-5.5 + 9$$

$$3.5$$

$$\begin{array}{r} 9.10 \\ \cancel{9.0} \\ - 5.5 \\ \hline 3.5 \end{array}$$

4. $\sqrt{x} - 5; x = 16$

$$4. \sqrt{x} - 5 : \underline{x=16}$$

$$\begin{array}{r} \sqrt{16} - 5 \\ \hline 4 - 5 \\ -1 \end{array}$$

5. $|x| + 5.7; x = -3.4$

$$5. |x| + 5.7 : \underline{x = -3.4}$$

$$\underline{|(-3.4)| + 5.7}$$

$$3.4 + 5.7$$

$$9.1$$

6. $\sqrt{-27 \div x}; x = -\frac{3}{4}$

$$6. \sqrt{-27 \div x} \quad : x = -\frac{3}{4}$$

$$\sqrt{-27 \div (-\frac{3}{4})}$$

$$\sqrt{-27 \times (-\frac{4}{3})}$$

$$\sqrt{\frac{108}{3}}$$

$$\sqrt{\frac{36}{1}}$$

$$\frac{\sqrt{36}}{\sqrt{1}}$$

$$\frac{6}{1}$$

$$6$$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

7. $3x + 2y$

$$7. 3x + 2y$$

$$3\left(\frac{2}{3}\right) + 2(-3)$$

$$2 - 6$$

$$-4$$

$$2 + (-6)$$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

8. $6x - 4y$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

9. $\sqrt{-3y} - \frac{3}{4}x$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

10. $3x + |5y|$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

11. $\frac{x + 5y}{2x - 2y}$

Evaluate the given expression for $x = \frac{2}{3}$ and $y = -3$.

12. $\frac{4x - 6y}{2y} - \frac{5x}{10y}$

Evaluate the algebraic expression.

13. $3(x^2 - y^2 + 3z)$; $x = 4$, $y = -3$, $z = -12$

Evaluate the algebraic expression.

14. $\sqrt{3a^2 + c} - (b + 3a); a = 3, b = 9, c = -2$