

Elementary Algebra Skill

## Evaluating Algebraic Expressions Using Decimal Numbers

**Evaluate each using the values given.**

1)  $x + \frac{z}{-4}$ ; use  $x = 0.6$ , and  $z = -0.1$

2)  $|x - y|$ ; use  $x = -5$ , and  $y = 5.2$

3)  $q(p - r)$ ; use  $p = 2.9$ ,  $q = -4.6$ , and  $r = -4.2$

4)  $h - \frac{j}{j}$ ; use  $h = 4.1$ , and  $j = -2.7$

5)  $m + q + q$ ; use  $m = 2.1$ , and  $q = 0.8$

6)  $4(5 + ab)$ ; use  $a = -3.5$ , and  $b = -0.8$

7)  $|m| + 3p$ ; use  $m = -4.4$ , and  $p = 4.8$

8)  $j(h - h) + k$ ; use  $h = 3.4$ ,  $j = 3.4$ , and  $k = 1.7$

9)  $\frac{-5x + 4z}{z}$ ; use  $x = -5.2$ , and  $z = 5.5$

10)  $\frac{5xy}{z + y}$ ; use  $x = -1$ ,  $y = -0.8$ , and  $z = 0.6$

11)  $z \div x + y^2$ ; use  $x = -1.8$ ,  $y = 0.1$ , and  $z = 2.7$

12)  $x - y + yz$ ; use  $x = 1$ ,  $y = 5.2$ , and  $z = -5.8$

13)  $-2q \cdot p \div 2$ ; use  $p = 0.1$ , and  $q = -5.2$

14)  $m(-6 + m) - n + p$ ; use  $m = -2$ ,  $n = 4$ , and  $p = -0.3$

15)  $q\left(\frac{|p|}{p} - r\right)$ ; use  $p = -0.4$ ,  $q = 3$ , and  $r = -3.6$

16)  $\frac{z + 6}{-2 + x - x}$ ; use  $x = 3.9$ , and  $z = 0.009$

17)  $\frac{kk^2 + j + h}{-2}$ ; use  $h = 5.9$ ,  $j = -4.7$ , and  $k = -0.2$

18)  $r^2 - (r - 5(r - p))$ ; use  $p = 4$ , and  $r = -5.8$

19)  $x - x(|y| + z^2)$ ; use  $x = 3.7$ ,  $y = 3.2$ , and  $z = -2.8$

20)  $\frac{4p}{n^3} + 1$ ; use  $n = -2$ , and  $p = -5.2$

## Answers to Evaluating Algebraic Expressions Using Decimal Numbers

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|------------------|-----------|-------------|-------------|
| 1) 0.625         | 2) 10.2   | 3) -32.66   | 4) 3.1      |
| 5) 3.7           | 6) 31.2   | 7) 18.8     | 8) 1.7      |
| 9) 8.72727272727 | 10) -2    | 11) -1.49   | 12) -34.36  |
| 13) 0.52         | 14) 11.7  | 15) 7.8     | 16) -3.0045 |
| 17) -0.596       | 18) -9.56 | 19) -37.148 | 20) 3.6     |