

Algebraic Substitution

Evaluate each using the values given. SHOW ALL OF YOUR WORK!

1) $y + x + x^2$; use $x = -5$, and $y = 1$

2) $m^2 - n^2$; use $m = -4$, and $n = 1$

3) $qp - 4q$; use $p = -3$, and $q = -6$

4) $(j)(-2 - j) + h$; use $h = 2$, and $j = -1$

5) $1 - (ab)^2$; use $a = -2$, and $b = 2$

6) $y + (6)(x + y)$; use $x = 6$, and $y = 1$

7) $(6x)(y - x)$; use $x = -1$, and $y = 4$

8) $y + 5 - (x + 2)$; use $x = 2$, and $y = -2$

9) $5x - 2 + y$; use $x = 2$, and $y = 1$

10) $\frac{m^2 - p}{6}$; use $m = 3$, and $p = 3$

11) $(y)(-1 + y - x^2)$; use $x = -2$, and $y = -5$

12) $j - \left(\frac{2 + j}{6} + k\right)$; use $j = 4$, and $k = -1$

13) $(-2)^2 - (m)(n + 1)$; use $m = 6$, and $n = 4$

14) $6^2 - (m^2 + p)$; use $m = 4$, and $p = 5$

15) $(p)\left(q - \left(\frac{p}{5} + p\right)\right)$; use $p = -5$, and $q = -1$

16) $m + m - n^2 - n$; use $m = -4$, and $n = -1$

$$17) y - (-2 - 5) + \frac{y}{x}; \text{ use } x = \frac{1}{4}, \text{ and } y = -1$$

$$18) x - (x - (y + x) - y); \text{ use } x = 1, \text{ and } y = \frac{3}{2}$$

$$19) x + 4y + y^3; \text{ use } x = 1, \text{ and } y = -\frac{1}{3}$$

$$20) 1 + \frac{(4)(y + 5)}{x}; \text{ use } x = -\frac{2}{3}, \text{ and } y = -\frac{3}{4}$$

Answers to Algebraic Substitution (ID: 1)

1) 21

5) -15

9) 9

13) -26

17) 2

2) 15

6) 43

10) 1

14) 15

18) 4

3) 42

7) -30

11) 50

15) -25

19) $-\frac{10}{27}$

4) 3

8) -1

12) 4

16) -8

20) $-\frac{49}{2}$