

EVALUATING POLYNOMIALS

Evaluate each of the following for the indicated values.

1. $x - 1$ when $x = -3$

2. $4 + x$ when $x = -11$

3. $x + 7$ when $x = -11$

4. $-3 + x$ when $x = 5$

5. $8 - 2(x + 2y)$ when $x = -5$ and $y = -1$

6. $x^2 + 2x - 5$ when $x = -3$

7. $x^2 + 4x - 2$ when $x = -2$

8. $-(3x^2 - 4x + 8)$ when $x = -2$

9. $a^2 - bc$ when $a = 1.2$, $b = 0.6$ and $c = 2.5$

10. $\frac{x^2 - y^2}{3 + xy}$ when $x = 4$ and $y = -3$

11. $3x^2 + 2xy - y^2$ when $x = -1$ and $y = 3$

12. $5x - z + 2y$ when $x = -1$, $y = 3$ and $z = -2$

Evaluate each of the following when $x = \frac{3}{4}$, $y = \frac{1}{3}$ and $z = \frac{9}{16}$. Write answers as fractions in lowest terms.

13. $x + yz$

14. $x^2 \div z$

Evaluate the following if $x = -1$, $y = 3$, $z = -2$, $a = 4$ and $b = -5$.

15. $3y^2 + 2a$

16. $5x - z + 2b$

17. $z^2 - x^2$

18. $\frac{b - x}{2a}$

Answers

1. -4 2. -7 3. -4 4. 2 5. 22 6. -2 7. -6

8. -28 9. -0.06 10. $-\frac{7}{9}$ 11. -12 12. 3 13. $\frac{15}{16}$ 14. 1

15. 35 16. -13 17. 3 18. $-\frac{1}{2}$