

Math Vocabulary and Notation Practice

1. How many terms are in $6x^3 + \frac{1}{3}x^2 - 9x + \frac{2}{x}$?
2. How many terms are in $-2(x^2 + 3x + 1) + 5x(x + y)$?
3. How many terms are in $-2x^2 - 6x - 2 + 5x^2 + 5xy$?
4. How many terms are in $\frac{1}{4}x(2x + 3) - x^2 + 9$?
5. How many terms are in 5?
6. Is $6x^3 + \frac{1}{3}x^2 - 9x + \frac{2}{x}$ a polynomial? Why or why not?
7. Is $2x^3 + 8x^2 - \frac{3}{4}x + \frac{9}{16}$ a polynomial? Why or why not?
8. Is $2\sqrt{x} + 3$ a polynomial? Why or why not?
9. Is $7x^3 - 2x + 4x^{-3} - 5$ a polynomial? Why or why not?
10. Is $\frac{8}{9}$ considered to be a polynomial? Why or why not?
11. What would you do first to evaluate $7 - 6(x + 3)$?
12. What would you do first to evaluate $2(x + 3) - 4(x - 1)$?
13. What would you do first to evaluate $6\sqrt{4 + 25}$?
14. What would you do first to evaluate $\frac{2x + 3}{2} + 4$?
15. State True or False and give a brief explanation: $\frac{5x - 1}{5} = x - 1$
16. State True or False and give a brief explanation: $\frac{3x + 1}{x} = 3 + \frac{1}{x}$
17. State True or False and give a brief explanation: $\frac{2x + 1}{x^2 + 1} = \frac{3}{x + 1}$
18. State True or False and give a brief explanation: $\sqrt{1 - x^2} = 1 - x$
19. Translate the following equation into words: $\frac{4x - 5}{2}$
20. Translate the following equation into words: $\frac{x + 1}{2x - 1}$
21. Translate the following equation into words: $4 - 5x(x + 2)$
22. Translate the following equation into words: $\frac{2x}{y} + 7$
23. The sum of two numbers is 21. Three times the smaller number is two less than twice the larger number. Clearly state your variables, and find two equations representing the situation. Find the two numbers.
24. Find a rational number that is 3 times more than one fourth of the difference between 13 and 4.
25. One number is equal to 3 less than 5 times 6 more than a another number. Find an equation containing two variables representing this situation.