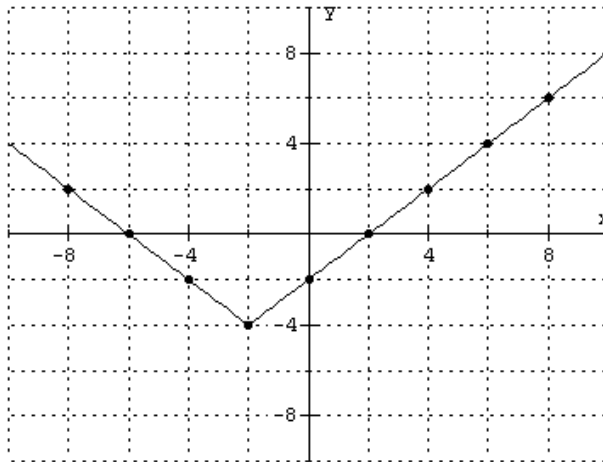


PRACTICE TEST 2, CHAPTER 5, 3.6, 8.2

Beginning and Intermediate Algebra by Elayn Martin-Gay, 6th edition

1. Given that $f(x) = x^2 - 9$, find $f(2)$ and $f(3)$.

Use the graph of the function below to answer #2 through #5



2. Find $f(-2)$.
 3. Find $f(6)$
 4. Find all values of x for which $f(x) = 2$.
 5. Find all values of x for which $f(x) = -2$.

Evaluate:

6. -3^2 7. $(-3)^2$ 8. $2xy^2$ for $x=2$ and $y=-3$

Simplify each expression. Write the answers without parentheses or negative exponents.

9. $(5xy^4)^3$ 10. $(-3x)(8x^3)$ 11. $(2x^4y^3)^0$

12. $\left(\frac{3x^3}{2b^4}\right)^4$ 13. $\left(\frac{3a^5}{b^8}\right)^3$ 14. $\frac{a^3}{a^{-12}}$

15. $\frac{7x^2y^9}{56x^2y^4}$ 16. $\frac{3x^3y^{-3}}{x^{-2}y^4}$

17. Classify $4x^5 - 3x^2$ as a monomial, binomial, or trinomial if possible. Find the degree of the polynomial.

Perform the indicated operation.

18. $(3x^2 + 7x - 5) + (-8x^2 - 2x + 4)$

19. $(-4x^2 - 3x + 1) - (12x^2 + 4x - 3)$

20. $3y^3(-4y^2 + 3y - 6)$

21. $(5x - 2)(2x + 4)$

22. $-2x(5x^2 - 6x + 3)$

23. $(a + 5)(a - 5)$

24. $(4x + 2)^2$

Math 0304

PRACTICE TEST 2 ANSWERS

1. -5 and 0	17. <i>Binomial</i> ;5
2. -4	18. $-5x^2 + 5x - 1$
3. 4	19. $-16x^2 - 7x + 4$
4. -8 and 4	20. $-12y^5 + 9y^4 - 18y^3$
5. -4 and 0	21. $10x^2 + 16x - 8$
6. -9	22. $-10x^3 + 12x^2 - 6x$
7. 9	23. $a^2 - 25$
8. 36	24. $16x^2 + 16x + 4$
9. $125x^3y^{12}$	
10. $-24x^4$	
11. 1	
12. $\frac{81x^{12}}{16b^{16}}$	
13. $\frac{27a^{15}}{b^{24}}$	
14. a^{15}	
15. $\frac{y^5}{8}$	
16. $\frac{3x^5}{y^7}$	