

Quiz 7 Retake Practice

Date _____ Period _____

Name each polynomial by degree and number of terms.

1) $6x^6 - 7x^3 - 8x^2 - 7x$

2) $x - 3$

3) $-6x^3$

4) -7

5) $-7x^6 - x^3$

6) $8p^2 + 3p$

7) $-10x^2 + 8$

8) $n - 1$

Simplify each expression.

9) $(8a^4 + 7a - 8a^3) - (4a^3 + 2a - a^4)$

10) $(1 + 6b^4 - b) + (b^4 - 8 - 2b)$

11) $(5x^4 + x^2 + 4) + (1 + 7x^2 + 3x^4)$

12) $(8p + 2p^4 + 7) + (7p - p^4 - 4)$

Find each product.

13) $(3a + 8)(4a - 6)$

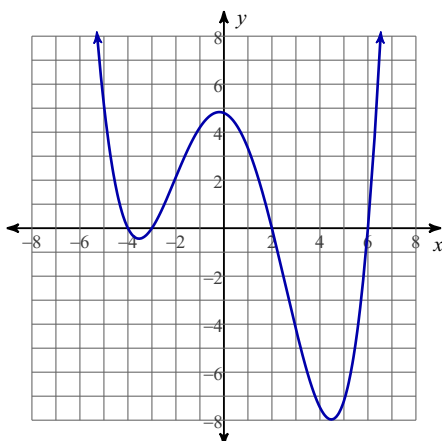
14) $(k + 7)(k - 5)$

15) $(6m - 4)(m - 1)$

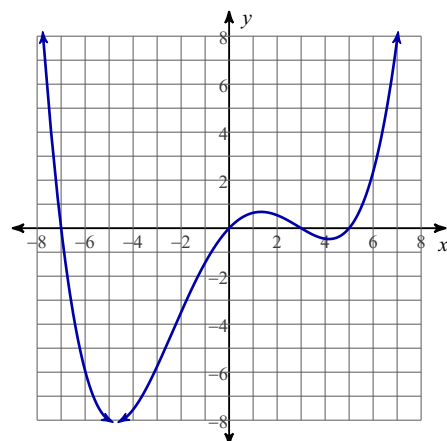
16) $(5v + 5)(3v - 6)$

Identify the zeros of the function.

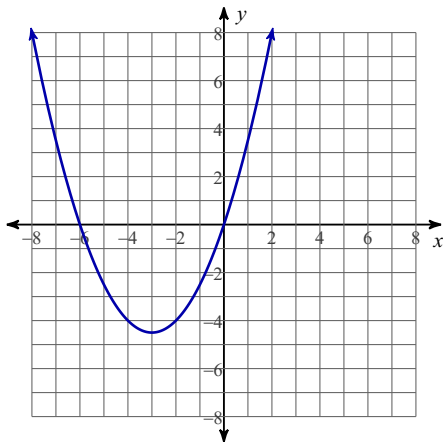
17)



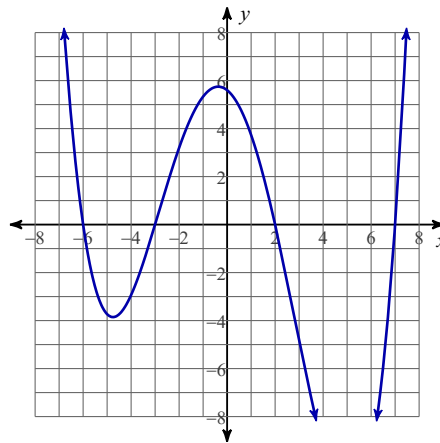
18)



19)



20)



21) $f(x) = (x - 4)(x + 1)(x - 3)$

22) $f(x) = x(x - 5)(2x - 7)(x + 4)$

23) $f(x) = 3x(x - 8)(x + 12)(4x + 197)$

24) $f(x) = (x - 5)(3x - 119)(x + 9)(2x - 11)$

Write a possible function given the zeros.

25) $x = 4, 5, -\frac{6}{7}$

26) $x = 6, -10, \frac{4}{3}, 0$

27) $x = \frac{2}{5}, -7, 10$

28) $x = -7, 12, \frac{114}{5}$

Factor the common factor out of each expression.

29) $-8r^3 - 4r^2 + 8r$

30) $20v^2 + 14v + 12$

31) $18v + 14v^2 + 18v^{11}$

32) $35r^5 - 56r - 42$

33) $3x(x - 7) + 5(x - 7)$

34) $4x^2(x - 6) + (x - 6)$

35) $4x(3x^2 - 7) - 9(3x^2 - 7)$

36) $9x(x - 5) - 7(x - 5)$