

Algebra 2 Unit 7b Polynomial Graphs WS

1. Sketch the end behavior of each polynomial.

a. $y = 4x^3 - 8x^6 + x^2$ b. $y = 3x^4 - 4x - 6$ c. $y = -x(x+3)(x-1)$ d. $y = (x+2)^3(x-7)^2$

2. Sketch a graph of each polynomial.

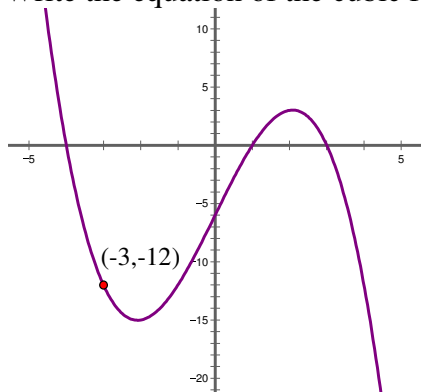
a. $y = -(x-3)^2(x+8)(x-6)^2(x+1)$ b. $y = x^3(x-3)^2(x+4)(x-7)$

c. $y = -2(x-6)^3(x)(x+4)^3$ d. $y = 5(x+2)^2(x-8)(x-3)$

e. $y = -3x(x-4)^2(x+2)^3(x-8)$ f. $y = (x-5)^3(x+3)^2$

3. Write an equation of a cubic function with x -intercepts 3, -2 and 5.

4. Write the equation of the cubic function.



5. Factor.

a. $3x^2 - 11x + 8$
 b. $x^3 + 3x^2 - 18x$
 c. $12x^2 - 3x^4$
 d. $x^3 + 2x^2 - 9x - 18$

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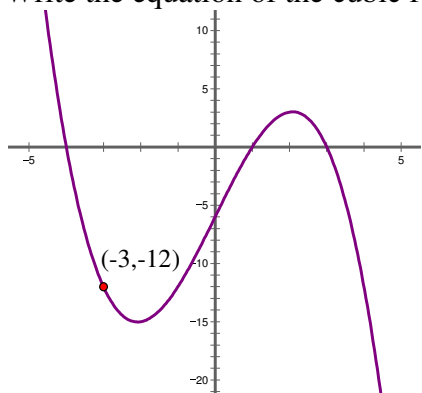
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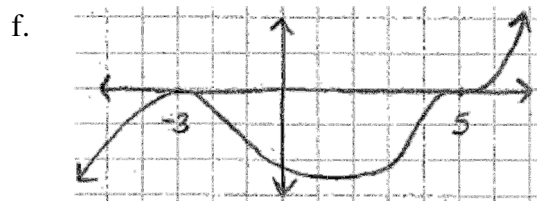
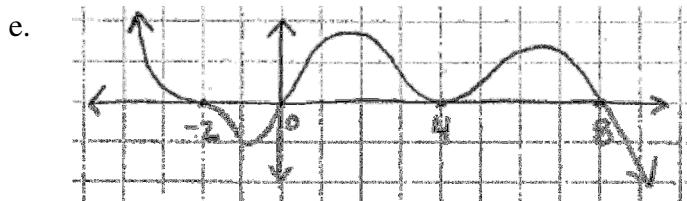
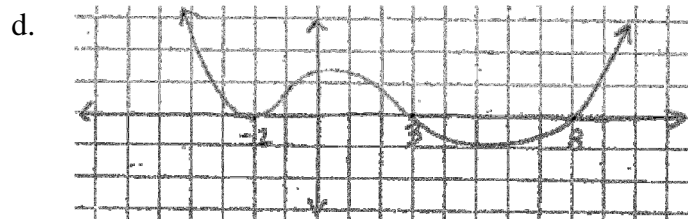
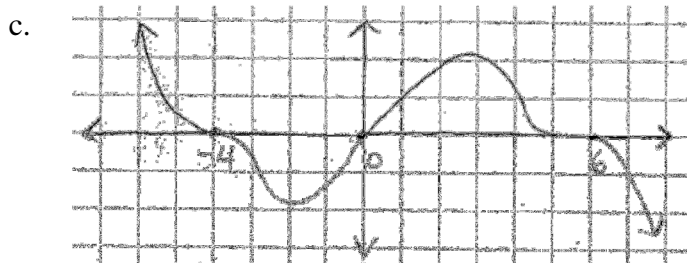
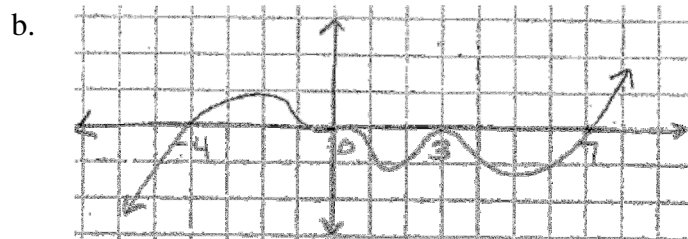
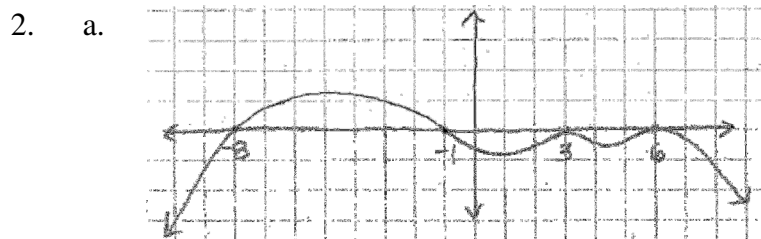
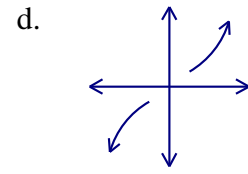
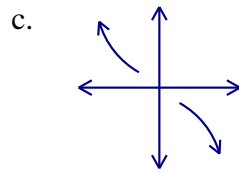
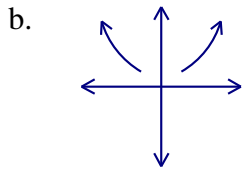
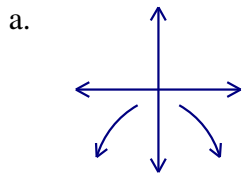


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Polynomial Graphs WS Answers
Algebra 2 Unit 7b

1. Sketch the end behavior of each polynomial.



3. $y = -2x^3 + 12x^2 + 2x - 60$

4. $y = \frac{-1}{2}(x-1)(x+4)(x-3)$

5. a. $(3x-8)(x-1)$

b. $x(x+6)(x-3)$

c. $3x^2(2+x)(2-x)$

d. $(x+2)(x+3)(x-3)$