

Name _____

12-7B Lesson Master**Questions on SPUR Objectives**

See pages 773–775 for objectives.

SKILLS Objective C

In 1–6, an equation for a function is given.

- Identify the x -intercepts of the graph of the function.
- Write the equation in standard form.

1. $y = 3(x - 1)(x + 5)(x - 3)$

a. _____

b. _____

2. $y = -(x - 2)(x + 2)(x - 3)$

a. _____

b. _____

3. $f(x) = (x - 1)^2(x + 2)$

a. _____

b. _____

4. $y = x^3(x + 3)(x - 7)$

a. _____

b. _____

5. $y = -2(x - 3)(x - 4)(x - 5)$

a. _____

b. _____

6. $g(x) = 2x(x - 2)^2$

a. _____

b. _____

PROPERTIES Objective FIn 7 and 8, suppose the graph of a polynomial function has the given x -intercepts.

- Write an equation in factored form for the polynomial function.
- Rewrite your equation from Part a in standard form.

7. $-3, \frac{3}{2}, 5$

a. _____

b. _____

8. $-5, -2, 0$

a. _____

b. _____

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PROPERTIES Objective F

In 9 and 10, suppose the graph of a polynomial function has the given x -intercepts.

- a. Write an equation in factored form for the polynomial function.
 b. Rewrite your equation from Part a in standard form.

9. $\pm 5, -1, 0$

a. _____

b. _____

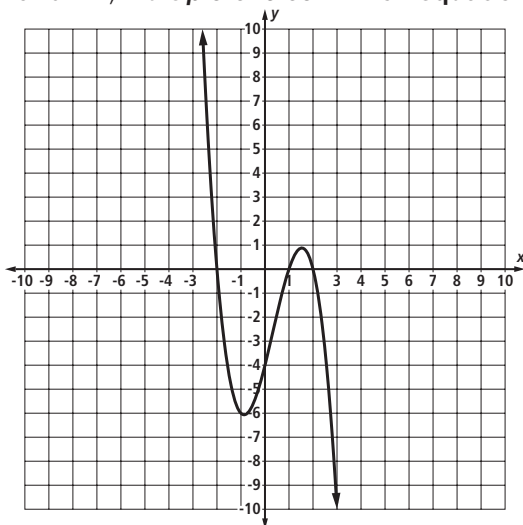
10. $-\frac{1}{2}, -\frac{2}{5}, 0, 3$

a. _____

b. _____

In 11 and 12, *multiple choice*. Which equation represents the graph?

11.



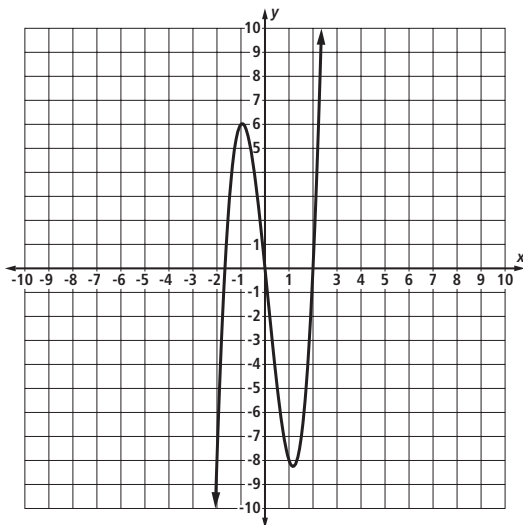
A $y = -(x + 1)(x - 2)(x + 2)$

B $y = -(x - 1)(x + 2)(x - 2)$

C $y = (x - 1)(x + 2)(x - 2)$

D $y = (x + 1)(x - 2)(x + 2)$

12.



A $y = -x(3x - 5)(x + 2)$

B $y = x(3x - 5)(x + 2)$

C $y = x(3x + 5)(x - 2)$

D $y = -x(3x + 5)(x - 2)$
