



9-2 Additional Practice

Solving Quadratic Equations By Factoring

Solve each equation.

1. $(x - 5)(x + 7) = 0$

2. $(2x - 7)(5x + 3) = 0$

3. $x(x + 4)(5 - 2x) = 0$

Solve each equation by factoring.

4. $x^2 - 4x - 21 = 0$

5. $x^2 + 100 = 20x$

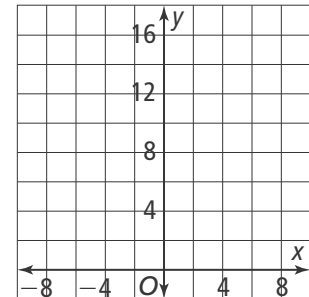
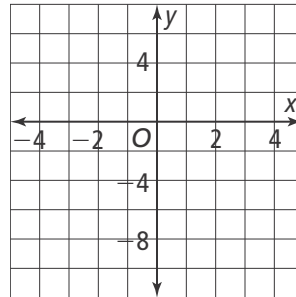
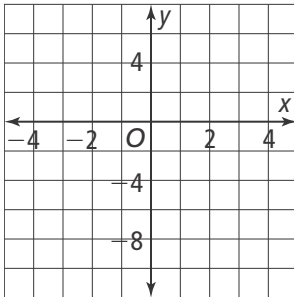
6. $6x^2 = x + 15$

Use factoring to graph the following quadratic functions.

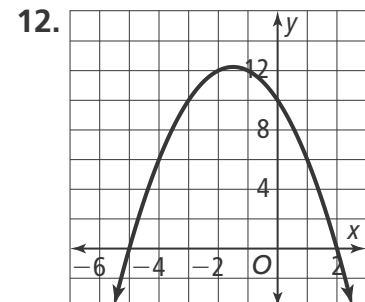
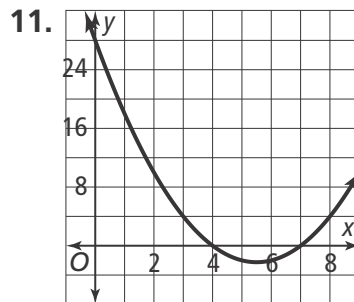
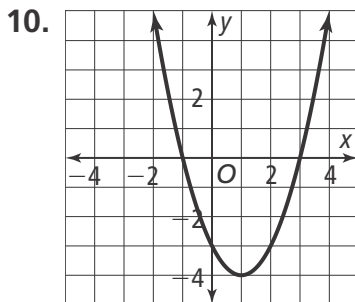
7. $f(x) = x^2 - 2x - 8$

8. $f(x) = x^2 - 9$

9. $f(x) = -x^2 - 4x + 12$



Write the factored form for each quadratic function.



13. What feature of a quadratic function is revealed when it is in its factored form?

14. The area of the rubber coating for a flat roof is 96 ft^2 . The rectangular frame the carpenter built for the flat roof has a length that is 4 feet greater than the width. What are the dimensions of the frame?