

Solve each equation by factoring and the Zero Product Property:

1. $(w - 3)(w + 6) = 0$

2. $x(x + 1)(x + 5) = 0$

3. $(2x - 3)(3x + 8) = 0$

4. $x^2 + 4x - 12 = 0$

5. $x^2 + 11x + 24 = 0$

6. $x^2 - 2x - 15 = 0$

7. $x^2 - 3x = 10$

8. $x^2 + 10x = -16$

9. $x^2 + 36 = 12x$

10. $2x^2 + 6x + 18 = 0$

11. $6x^2 - 13x = -6$

12. $5x^2 - 6 = -7x$

13. $3x^5 - 12x^3 = 0$

14. $9y^2 = -45y$

15. $2m^3 - 2m^2 - 3m + 3 = 0$

16. The height of a flare shot into the air can be approximated by the function $h = -16t^2 + 95t + 6$, where h is the height in feet and t is the time in seconds. Find the time it takes the flare to hit the ground.