

1. $\left(\frac{b}{2}\right)^2$

2. perfect square trinomial; $(x - 3)^2$

3. $x = 9$ and $x = -1$

4. $r = 4$ and $r = 6$

5. $x = 9 \pm \sqrt{5}$

6. $m = -4 \pm 3\sqrt{5}$

7. $y = 12 \pm 10i$

8. $x = 13 \pm i\sqrt{13}$

9. $w = \frac{-1 \pm 5\sqrt{3}}{2}$

10. $x = \frac{3}{2}$ and $x = \frac{1}{2}$

11. 25; $(x + 5)^2$

12. 100; $(x + 10)^2$

13. 36; $(y - 6)^2$

14. 121; $(t - 11)^2$

15. 9; $(x - 3)^2$

16. 144; $(x + 12)^2$

17. $\frac{25}{4}$; $\left(z - \frac{5}{2}\right)^2$

18. $\frac{81}{4}$; $\left(x + \frac{9}{2}\right)^2$

19. $\frac{169}{4}$; $\left(w + \frac{13}{2}\right)^2$

20. 169; $(s - 13)^2$

25. $x = -3 \pm \sqrt{6}$

26. $s = -1 \pm \sqrt{7}$

27. $x = -2 \pm \sqrt{6}$

28. $t = 4 \pm \sqrt{21}$

29. $z = \frac{-9 \pm \sqrt{85}}{2}$