

E Summer Quadratic Simultaneous

1. Solve $\begin{cases} y + x = 3 \\ x^2 + y^2 = 5 \end{cases}$ (1, 2) or (2, 1)
 2. Solve $\begin{cases} y - x = 4 \\ y^2 - x^2 = 8 \end{cases}$ (-1, 3)
 3. Solve $\begin{cases} y = 2x + 4 \\ 4x^2 + 4 = y \end{cases}$ $(\frac{1}{2}, 5)$ or (0, 4)
 4. Solve $\begin{cases} y - 3x = 8 \\ 2x^2 - y^2 = 17 \end{cases}$ (-3, -1) or $(-\frac{27}{7}, -\frac{25}{7})$
 5. Solve $\begin{cases} x = 2y + 3 \\ x^2 + xy = 0 \end{cases}$ (1, -1) or $(0, -\frac{3}{2})$
 6. Solve $\begin{cases} y + x = 1 \\ x^2 + y^2 = \frac{5}{9} \end{cases}$ $(\frac{1}{3}, \frac{2}{3})$ or $(\frac{2}{3}, \frac{1}{3})$
 7. Solve $\begin{cases} y = 4x^2 + 1 \\ 3y = 8x + 2 \end{cases}$ $(\frac{1}{2}, 2)$ or $(\frac{1}{6}, \frac{10}{9})$
 8. Solve $\begin{cases} y = 3x - 2 \\ x^2 + y^2 = 20 \end{cases}$ (2, 4) or $(-\frac{4}{5}, -\frac{22}{5})$
 9. Solve $\begin{cases} y = 3x + 1 \\ 3x + y^2 = 5 \end{cases}$ $(\frac{1}{3}, 2)$ or $(-\frac{4}{3}, -3)$
 10. Solve $\begin{cases} 2x + 3y = 8 \\ x^2 + y^2 = 5 \end{cases}$ (1, 2) or $(\frac{19}{13}, \frac{22}{13})$
 11. Solve $\begin{cases} x + y = 2 \\ y^2 - x^2 = 3 \end{cases}$ $(\frac{1}{4}, \frac{7}{4})$
 12. Solve $\begin{cases} x + y = 2 \\ 2x^2 + y^2 = 3 \end{cases}$ (1, 1) or $(\frac{1}{3}, \frac{5}{3})$
 13. Solve $\begin{cases} 2x + y = 1 \\ x^2 - y^2 = -1 \end{cases}$ (0, 1) or $(\frac{4}{3}, -\frac{5}{3})$
 14. Solve $\begin{cases} 3y = x - 5 \\ 2x^2 + y^2 = 6 \end{cases}$ (-1, -2) or $(\frac{29}{19}, -\frac{22}{19})$
 15. Solve $\begin{cases} 3x + y = 6 \\ x^2 - xy - y^2 + 11 = 0 \end{cases}$ (1, 3) or (5, -9)
 16. Solve $\begin{cases} y = 2x + 2 \\ 4x^2 + y^2 = 74 \end{cases}$ $(\frac{5}{2}, 7)$ or $(-\frac{7}{2}, -5)$
- HARDER FROM NOW ON. . .
17. Solve $\begin{cases} y = x^2 + 3 \\ x^2 + y^2 = 17 \end{cases}$ (1, 4) or (-1, 4)
 18. Solve $\begin{cases} 3x + 2y = 8 \\ x^2 - 2y^2 + xy = 4 \end{cases}$ (2, 1) or $(\frac{18}{5}, -\frac{7}{5})$
 19. Solve $\begin{cases} 3x - 5y = -7k \\ 2x^2 + y^2 = 4k^2 \end{cases}$ or
 20. Solve $\begin{cases} 3x + y = 6a \\ x^2 + y^2 = 5a^2 \end{cases}$ or
 21. Solve $\begin{cases} x^2 + y^2 = 29 \\ 3x^2 - 2y^2 = 68 \end{cases}$ or