Simultaneous Equations - Non Linear

LEAMY
MATHS COMMUNITY

Solve the following non linear simultaneous equations;

1. $x + y = 3$
   $x^2 + y^2 = 5$

2. $x + y = 5$
   $x^2 + y^2 = 13$

3. $x + y = 7$
   $x^2 + y^2 = 25$

4. $x + y = 2$
   $x^2 + y^2 = 10$

5. $x + y = 3$
   $x^2 + y^2 = 29$

6. $x + y = 6$
   $x^2 + y^2 + 2x + 4y - 40 = 0$

7. $x + y = -1$
   $x^2 + y^2 - 4x + 2y - 29 = 0$

8. $x - y = 8$
   $x^2 + y^2 - 6x + 6y + 14 = 0$

9. $x - y = 5$
   $x^2 + y^2 + 4x - 8y - 41 = 0$

10. $3x - 2y = 7$
    $x^2 + y^2 = 5$

11. $2x + 3y = -5$
    $x^2 + y^2 = 13$

12. $5x - 2y + 18 = 0$
    $x^2 + y^2 + 2x + 2y - 24 = 0$

13. $5x + 2y = 3$
    $2x^2 + 2y^2 + 3x + 3y - 81 = 0$