

Algebra 3 Assignment # 4

Systems of Equations

Solve each of the following systems of equations using any method please.

(1) $3x^2 + 2y^2 = 30$
 $2x^2 - y^2 = -1$

(2) $x^2 + y^2 - 4x - 4y = -4$
 $x^2 + y^2 = 4$

(3) $x^2 + 3x - 2y = 2$
 $x - 2y = 3$

(4) $2x - 3y = 1$
 $y = \sqrt{3x - 5}$

(5) $x^2 + y^2 + 2x - 6y = 0$
 $x^2 + y^2 - 2x - 2y = 8$

(6) $4x^2 + 3y^2 - 6x + 5y = 2$
 $2x + 3y = 1$

(7) $x^3 - y^3 = -19$
 $x - y = -1$

(8) $x^2 + x - y = 1$
 $x^2 + y^2 = 2$

Algebra 3 Assignment # 4

Answers

(1) $(2, 3), (2, -3), (-2, 3), (-2, -3)$ **(2)** $(0, 2), (2, 0)$

(3) $(-1, -2)$

(4) $(2, 1), \left(\frac{23}{4}, \frac{7}{2}\right)$

(5) $(2, 4), (-2, 0)$

(6) $\left(0, \frac{1}{3}\right), (2, -1)$

(7) $(2, 3), (-3, -2)$

(8) $(1, 1), (-1, -1)$