<u>Solving Non-Linear Simultaneous</u> <u>Equations</u>

Solve these simultaneous equations.

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

$$y = 3x$$

(b)
$$y = x^2 + 5x$$

$$y = 2x + 10$$

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

$$y = 3x + 1$$

Solve these simultaneous equations.

(a)
$$x^2 + 8y = 13$$

$$x + 2y = 2$$

(b)
$$y = 2x^2$$

$$3x + y = 20$$

(c)
$$y = 3x^2 - 4$$

$$y = 2x - 3$$

Solve these simultaneous equations.

(a)
$$x^2 + y^2 = 25$$

$$x + y = 7$$

(b)
$$x^2 + y^2 = 9$$

$$y = x + 3$$

(c)
$$x^2 + y^2 = 5$$

$$y = 3x + 5$$

A netball court has an area of 224 m^2 . If the length were decreased by 1 m and the width increased by 1 m, the area would be increased by 1 m². Find the dimensions of the court.

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