Maths

Solving Quadratic Equations, Given a Different Quadratic, Using a Sketch
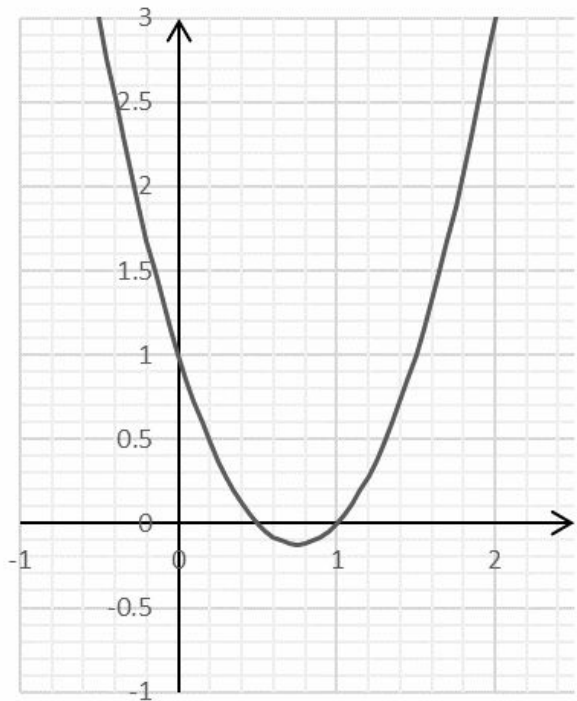
Miss Davies

Please note some slides do have colour font on them

Plot quadratic equations

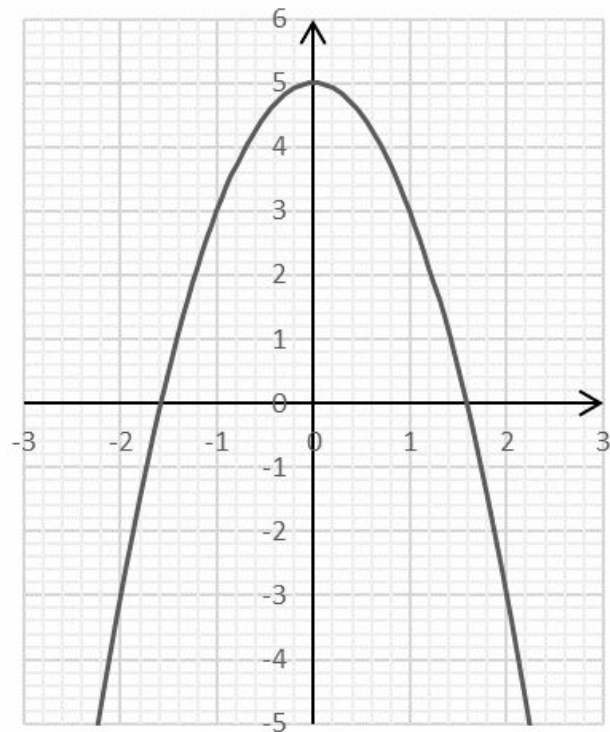1. The graphs show $y = 2x^2 - 3x + 1$

By sketching a suitable graph, approximate the solutions to $2x^2 - 4x = 0$

Plot quadratic equations

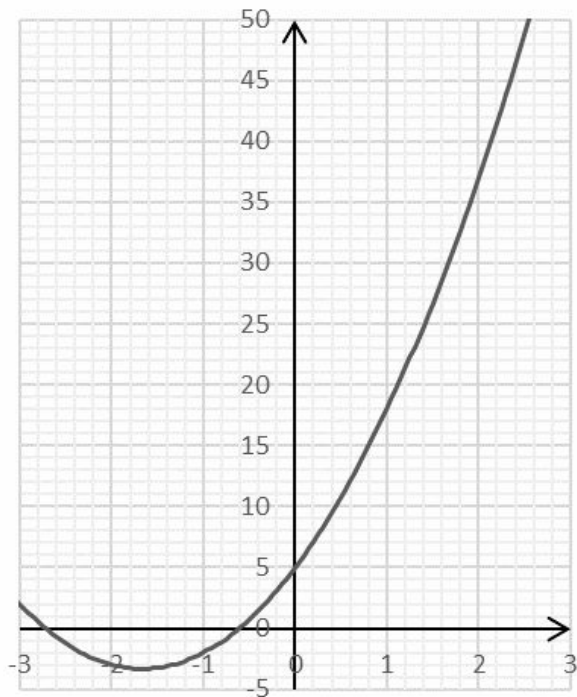2. The graphs show $y = 5 - 2x^2$

By sketching a suitable graph, approximate the solutions to $7 + x - 2x^2 = 0$

Plot quadratic equations

3. The graphs show $y = 3x^2 + 10x + 5$

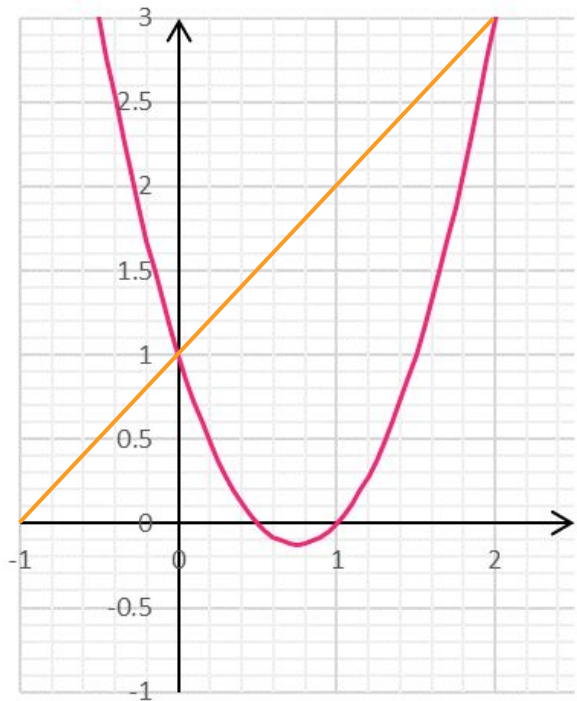By sketching a suitable graph, approximate the solutions to $3x^2 + 11x + 7 = 0$

Answers

Plot quadratic equations
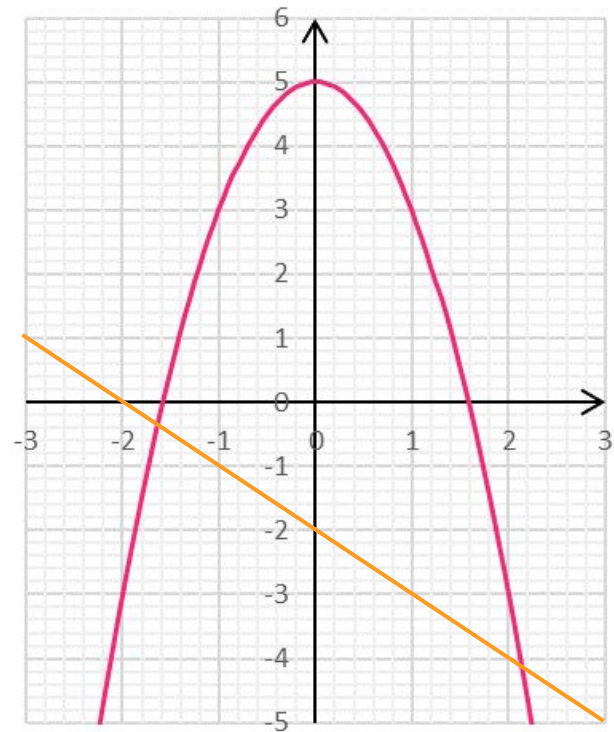
1. The graphs show $y = 2x^2 - 3x + 1$

By sketching a suitable graph, approximate the solutions to $2x^2 - 4x = 0$

$$x = 1 \qquad x = 2$$

Plot quadratic equations
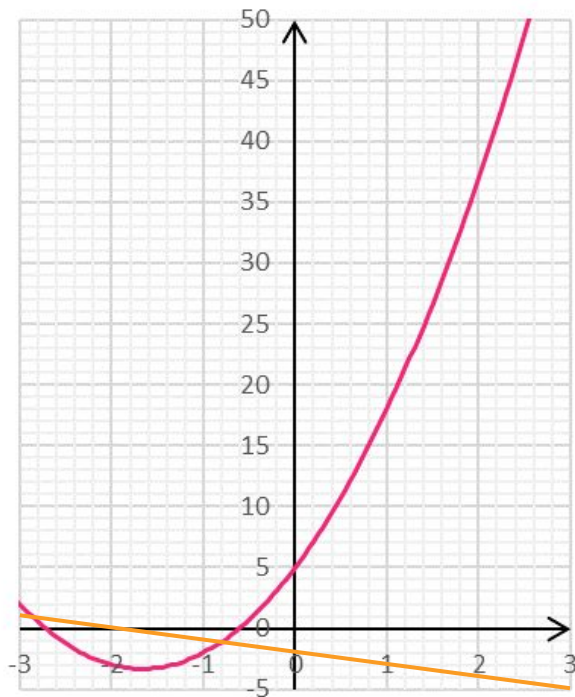
2. The graphs show $y = 5 - 2x^2$

By sketching a suitable graph, approximate the solutions to $7 + x - 2x^2 = 0$

$$x = -1.65 \qquad x = 2.15$$

Plot quadratic equations

3. The graphs show $y = 3x^2 + 10x + 5$

By sketching a suitable graph, approximate the solutions to $3x^2 + 11x + 7 = 0$

$$x = -2.8 \qquad x = -0.8$$