



Draw the graph $y = x^2 - x$ for values of x from -2 to 3

x	-2	-1	0	1	2	3
y	6	2	0	0	2	6

By drawing an appropriate linear graph, solve the equation

$$x^2 - 3x + 1 = 0$$

Give your answers to 1 decimal place

$$y = x^2 - x$$

$$0 = x^2 - 3x + 1$$

$$y = 2x - 1$$

$$x = 2.8$$

$$x = 0.3$$

Express 4^{3x+5} in the form 2^y

$$(2^2)^{3x+5}$$

$$2^{6x+10}$$

There are x apples in a crate.
2 of the apples are bad.

Jesse chooses two apples from the crate, without replacement.

The probability that he selects two bad apples is $\frac{1}{28}$

$$\frac{2}{x} \times \frac{1}{x-1} = \frac{1}{28}$$

$$\frac{2}{x(x-1)} = \frac{1}{28}$$

$$x(x-1) = 56$$

$$x^2 - x - 56 = 0$$

Prove $x^2 - x - 56 = 0$

Find x , the number of apples in the crate

$$(x-8)(x+7) = 0$$

$$x = 8$$