

Work out 6^0

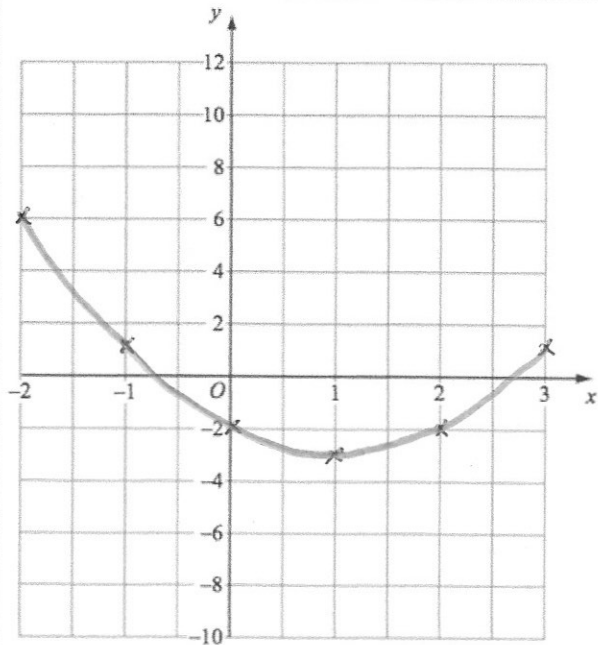
1

Work out 5^{-4}

$$\frac{1}{5^4} = \frac{1}{625}$$

Draw $y = x^2 - 2x - 2$

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

Use the graph to estimate the solutions to $x^2 - 2x - 2 = 0$

$$x = -0.7$$

or

$$x = 2.7$$

An online retailer normally sells clothes at 50% more than the cost price.¹⁰⁰
In a sale the price of all clothes are reduced until they are only 5% more than the cost price.

By what percentage of the original selling price have the price of the clothes been reduced?

$$150 \times y = 105$$

$$y = \frac{105}{150} = 0.7$$

30%

Simplify

$$\frac{x^2 + 13x + 40}{x^2 + 14x + 48}$$

$$\frac{x+5}{x+6}$$

$$\frac{(x+5)(x+8)}{(x+6)(x+8)}$$