

The equation $x^3 + 3x = 41$ has a solution between 3 and 4

Use a trial and improvement method to find this solution.
Give your answer correct to one decimal place.
You must show **all** your working.

Answer $x = \dots\dots\dots$ (4 marks)

Use trial and improvement to find a solution to the equation

$$x^3 + 6x = 29$$

Continue the table of results.
Give your solution to 1 decimal place.

x	$x^3 + 6x$	Comment
2	20	Too small

Use trial and improvement to solve this problem.

$$x^3 - 2x = 7$$

Give your answer to 1 decimal place.
Show all your trials and their outcomes.

The equation $2x^2 + x = 7$ has a solution between $x = 1$ and $x = 2$.

Use trial and improvement to find this solution correct to 1 decimal place.

(a) Show that the equation $x^3 + 3x - 7 = 0$ has a solution between $x = 1$ and $x = 2$.

(b) Using trial and improvement, find this solution correct to 1 decimal place. Show all your trials and their outcomes.

The equation $x^3 - 6x = 72$ has a solution between 4 and 5

Use a trial and improvement method to find this solution.

Give your answer correct to one decimal place.

You must show **all** your working.