

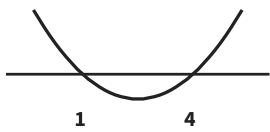
Quadratic Inequalities

1

Solve $x^2 - 5x + 4 < 0$

factorise

$(x - 1)(x - 4)$

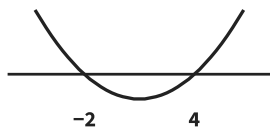


Answer _____

2

Solve $x^2 - 2x - 8 > 0$

factorise

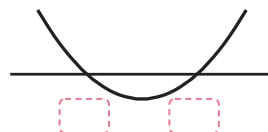


Answer _____

3

Solve $x^2 - 7x + 10 < 0$

factorise

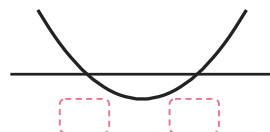


Answer _____

4

Solve $x^2 + x - 6 > 0$

factorise



Answer _____

5

Solve $x^2 - 9 \leq 0$



Answer _____

6

Solve $x^2 + 6x + 5 \geq 0$



Answer _____

7

Write down all the integers that satisfy $x^2 < 10$

Answer _____

8

Solve $x^2 - 5x < 0$

Answer _____

Quadratic Inequalities *further practice*

9

Solve $x^2 + 2x - 15 \geq 0$

Answer _____

10

Solve $x^2 < 3x + 10$

Answer _____

11

How many whole numbers satisfy $x^2 + 3x - 18 \leq 0$?

Answer _____

12

Solve $2x^2 - 7x + 3 > 0$

Answer _____

13

A stall sells phone cases at £ x each. Its daily profit is $P = 12x - x^2 - 20$ pounds. For which prices does it make a profit?

Answer _____

14

A model rocket's height after t seconds is $h = 20t - 5t^2$ metres. For how many seconds is it higher than 15 m?

Answer _____

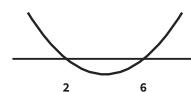
15

A rectangle is x cm wide and $(x + 4)$ cm long. Its area is less than 21 cm^2 . Find the range of possible values of x .

Answer _____

16

Leah solves $(x - 2)(x - 6) > 0$ and writes $2 < x < 6$. Explain her mistake and write the right answer.



Answer _____