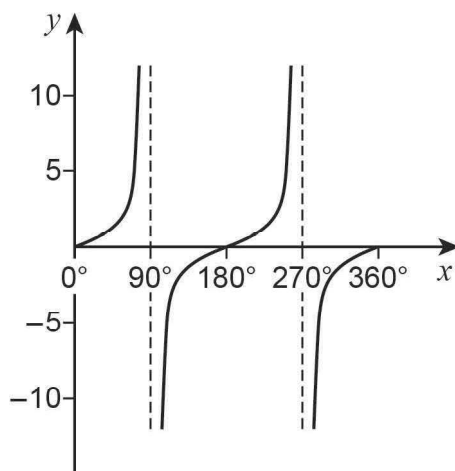


21 Here is a sketch of the graph of $y = \tan x$ where $0^\circ \leq x \leq 360^\circ$



You are given that $\tan 78.69^\circ = 5$

21 (a) Work out the other value of x where $\tan x = 5$ and $0^\circ \leq x \leq 360^\circ$

[1 mark]

Answer _____°

21 (b) Work out the **two** values of x where $\tan x = -5$ and $0^\circ \leq x \leq 360^\circ$

[2 marks]

Answer _____° and _____°



22

$$7^n = x$$

Match each expression on the left to the correct expression on the right.
One has been done for you.

[3 marks]

$$7^{-n}$$

$$7^{2n}$$

$$7^{n+1}$$

$$7^{\frac{1}{2}n}$$

$$7x$$

$$\frac{1}{x}$$

$$\frac{1}{2}x$$

$$\sqrt{x}$$

$$x^2$$

Turn over for the next question

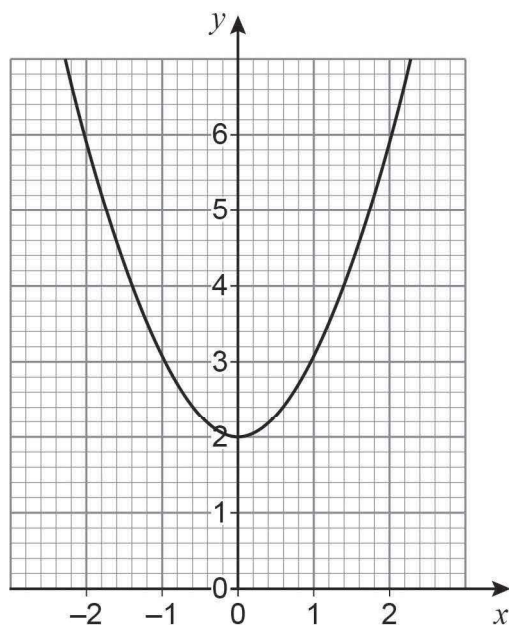
Turn over ►



23 In each part, the graph shown is a transformation of the graph $y = x^2$

23 (a) Write down the equation of the graph shown.

[1 mark]

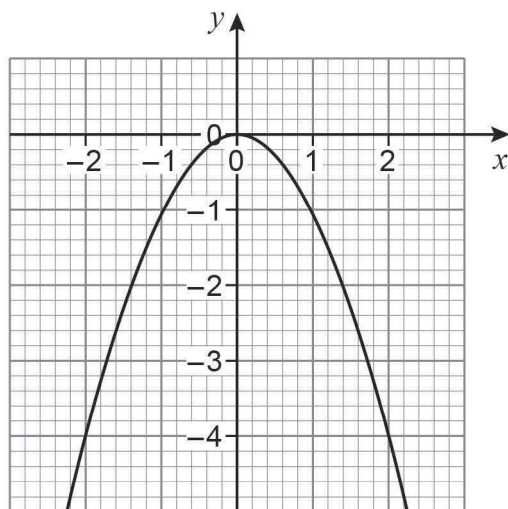


Answer _____



23 (b) Write down the equation of the graph shown.

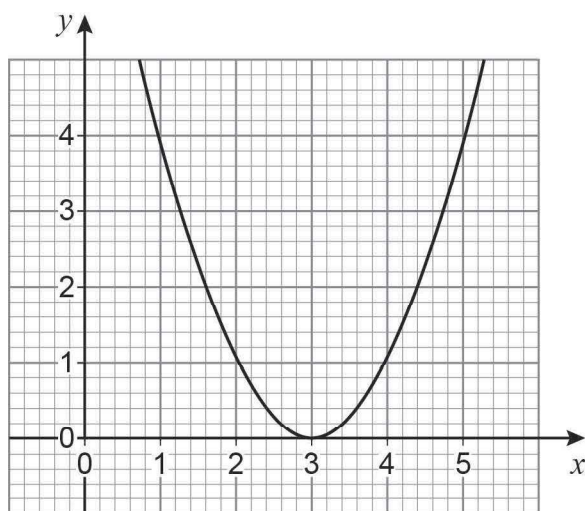
[1 mark]



Answer _____

23 (c) Write down the equation of the graph shown.

[1 mark]



Answer _____

END OF QUESTIONS

