

11th January



Corbettmaths

Simplify $\frac{(6x^{\frac{1}{2}})^3}{2x}$

$$\frac{216x^{\frac{3}{2}}}{2x} = 108x^{\frac{1}{2}}$$

or

$$108\sqrt{x}$$

Evaluate

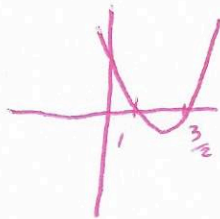
$$\left(1\frac{11}{25}\right)^{-\frac{1}{2}} = \left(\frac{36}{25}\right)^{-\frac{1}{2}}$$

$$\left(\frac{25}{36}\right)^{\frac{1}{2}} = \frac{5}{6}$$

Solve $2x^2 - 5x + 3 < 0$

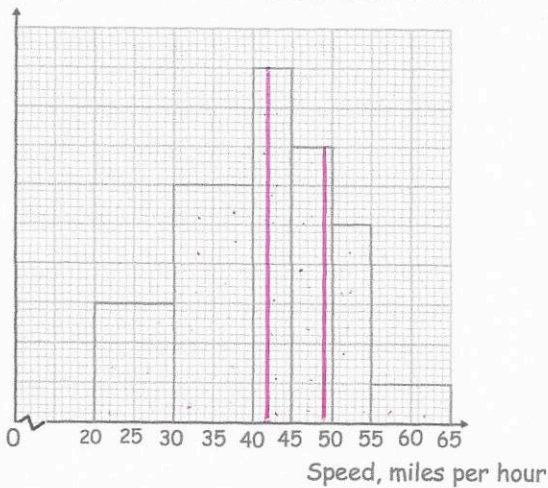
$$(2x-3)(x-1) = 0$$

$$x = \frac{3}{2} \text{ or } x = 1$$



$$1 < x < \frac{3}{2}$$

The histogram shows the speeds in miles per hour of 82 cars on a road.



Above 50 14 cars = 275 squares

1 car = 12.5 squares

$$\frac{42-49}{12.5} = 22$$

Calculate an estimate of the number of cars that were travelling between 42 and 49 mph.

22

14 cars were travelling over 50 mph.