11th January **Higher Plus 5-a-day**

Corbettmaths

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

$\dfrac{216x^{\frac{3}{2}}}{2x^1}$

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

Work out

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

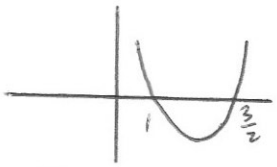
$\left(\frac{36}{25}\right)^{-\frac{1}{2}}$

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

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

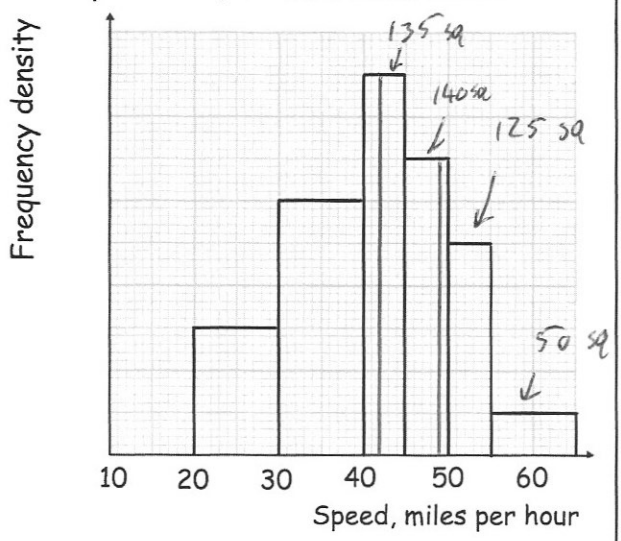
$(2x - 3)(x - 1)$

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



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

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



14 cars were travelling over 50 mph.

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

14 cars = 175 sq.

1 car = 12.5 sq.

135 + 140 = 275

275 ÷ 12.5 = 22

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