
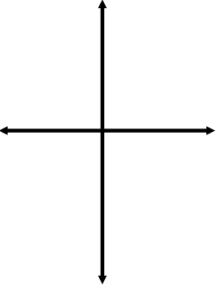

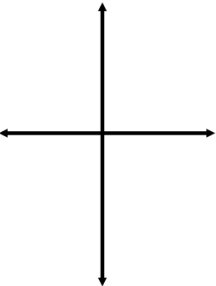


| 16th August  |               | Corbettmaths<br> |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
|--|---------------|---|--------------------|---|--------------------|----|--------------------|----|--------------------|----|--------------------|----|--|---|
| <p>A car travelled for 100 minutes, to the nearest 5 minutes.<br/>It travelled for a total distance of 100 km, to the nearest 10km</p> <p>Work out the greatest possible average speed, in m/s</p>   |               |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
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| Height (h cm)  | Frequency     |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| $110 < h \leq 120$   | 8             |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| $120 < h \leq 130$   | 16            |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| $130 < h \leq 140$   | 25            |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| $140 < h \leq 150$   | 32            |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| $150 < h \leq 160$   | 19            |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| Solve $2x^2 - x - 6 < 0$   |               |   |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |
| <p>Circle A has equation <math>x^2 + y^2 = 9</math> is translated by the vector <math>\begin{pmatrix} 0 \\ 2 \end{pmatrix}</math> to give Circle B</p> <p>Sketch Circle B</p> <p>Label the centre of B and the points of intersection with the x-axis</p>  |               |                    |                    |   |                    |    |                    |    |                    |    |                    |    |  |   |

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