# GCSE – Year 10
## Weekly Revision Tutorial - 11

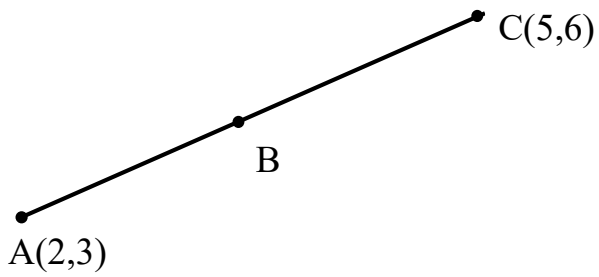
**1.** Solve by factorization; $3x^2 - 22x + 7 = 0$

**2.** Find the coordinates of intersection point of line $l_1$ and $l_2$.
$l_1 \equiv 3x + 2y - 1 = 0$ and $l_2 \equiv y - x - 3 = 0$

**3.** Simplify; $\frac{1}{x^2+2x+1} - \frac{1}{x^2+3x+2}$

**4.** Make $x$ the subject, if $y = \frac{3x^2-7}{5-2x^2}$

**5.**




AB:BC = 3:2
Find the coordinates at point B.

**6.** The table gives information about the heights of 50 trees.

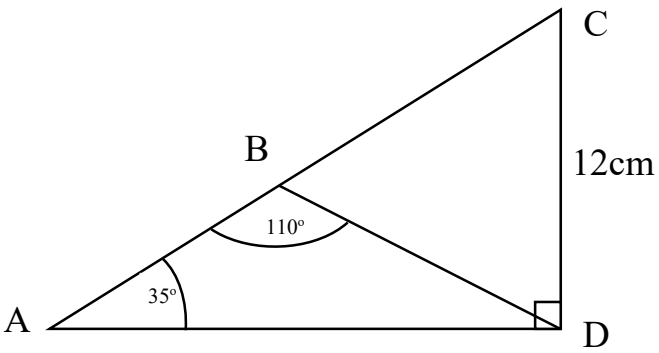
| Height (h) meters | Frequency |
|---|---|
| $0 < h \leq 4$ | 8 |
| $4 < h \leq 8$ | 21 |
| $8 < h \leq 12$ | 12 |
| $12 < h \leq 16$ | 7 |
| $16 < h \leq 20$ | 2 |

Work out an estimate for the mean height of the trees.

(*Edexcel 2016)*

Dharana Siriwarnage, PGD (maths), BSc

**7.**




BAD angle = 35°
ABD angle = 110°
CD = 12 cm
Find the length BD.

**8.** Find the coordinate of the Centre and the radius of the circle.
$x^2 + y^2 - 4x + 6y - 5 = 0$

**9.** Solve the inequality; $\frac{2x-3}{2} > 3x + 5$.

**10.** Equation of a curve is given by $y = ka^x$. Find the values of $k$ and $a$, if the curve passes trough points (1,2) and (2,5).