

HIGHER REVISION F

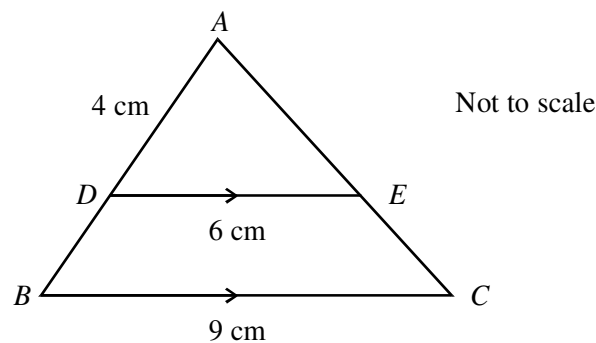
- Factorise $5k^2 - 10k$
- Factorise $x^2 - 7x + 12$
- (a) Expand $(a - b)^2$.
(b) Hence find the value of $a^2 + b^2 - 2ab$ if $a = 5$ and $b = -4$
- Solve $2(x - 3) = 9 - 4x$
- Jane invests £4000 using a compound interest rate of 5%. Show how much Jane will have after 3 full years of investment.

6. Simplify $\frac{8x^3y^2}{4xy^4}$

- Solve by elimination the simultaneous equations

$$\begin{aligned} 3x + 10y &= 2 \\ x + 12y &= 5 \end{aligned}$$

- Triangles ADE and ABC are similar.



Calculate the length of BD

9. Write as a single fraction $\frac{1}{2x+3} + \frac{1}{2x-1}$

10. Find the value of k such that $\sqrt{80} = k\sqrt{5}$