

7th June



Corbettmaths

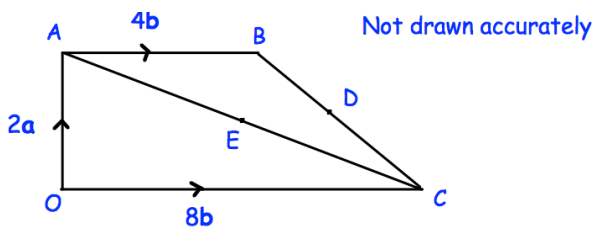
On 1st March 2001, the ratio of Freddie's age to his mother's age was 1:11
 On 1st March 2018, the ratio of Freddie's age to his mother's age was 2:5

Write the ratio of Freddie's age to his mother's age on 1st March 2030

$$\vec{OA} = 2\mathbf{a} \quad \vec{AB} = 4\mathbf{b} \quad \text{and} \quad \vec{OC} = 8\mathbf{b}$$

Point D is the midpoint of BC.
 Point E is the midpoint of AC.

Show \vec{ED} and \vec{OC} are parallel



Express $\frac{\sqrt{3} + 2}{2 - \sqrt{3}}$ in the form

$a + b\sqrt{3}$ where a and b are integers.

The line l is a tangent to the circle

$$x^2 + y^2 = 104 \text{ at the point P.}$$

P is the point (10, 2)

Work out the equation of the line l