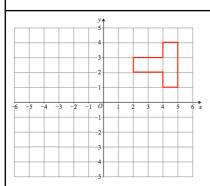
30th November



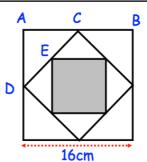
Describe fully a single transformation for which there is one invariant point

Solve

$$x^2 - 5x + 4 < 0$$

The midpoints of the sides of a square of side 16cm are joined to form another square. This process is then repeated to create the shaded square

Find the area of the shaded square.



Solve

$$\frac{4}{x+1} + \frac{2}{x-2} = 3$$

An octagonal pyramid has a base that is a regular octagon with side length 20cm.

The perpendicular height of the pyramid is 75cm.

Find the volume of the pyramid