

11th December

Corbettmaths

The points D and E have coordinates $(-4, 13)$ and $(6, 2)$.

Given DE is the diameter of the circle C.

Calculate the exact length of the diameter DE.

Find the equation of C

Solve the simultaneous equations

$$y - x + 2z = 2.1$$

$$3x - 2z - y + 2.5 = 0$$

$$8z + 10y + 5x = 4.5$$

The coefficient of the x^2 in the expansion of $(2x + a)^4$ is 1944.

Work out the possible values of a