

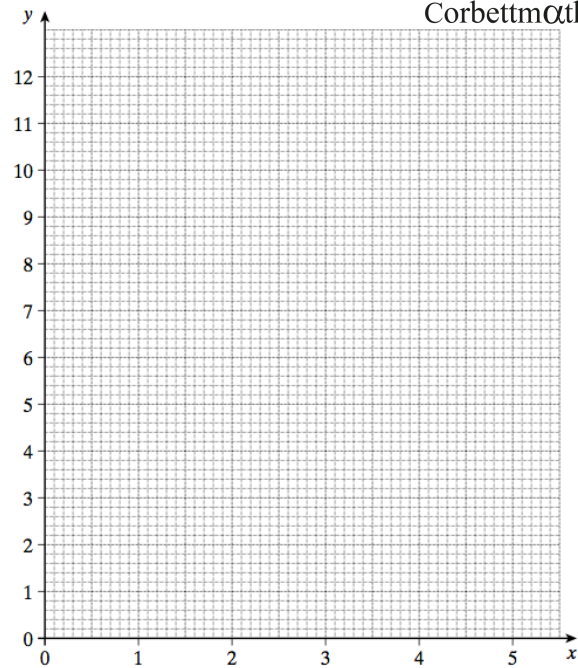
**20th September**

Corbettmaths

A function  $f(x)$  is defined as

$$f(x) = 9 - 3x \quad 0 \leq x < 3$$

$$= (5 - x)(x - 1) \quad 2 \leq x \leq 5$$

Draw the graph of  $y = f(x)$ Write down the equation of a circle with centre  $(-5, 3)$  and radius  $\sqrt{7}$ 

Solve the simultaneous equations

$$2x + 4y - z = 15$$

$$3x + 8y + z = 44$$

$$x + 2y + 2z = 15$$