

# MEI Pure Mathematics Core 1

## Co-ordinate geometry

Q. 2E

(13)  $x^2 + (y+4)^2 = 25$  has centre  $(0, -4)$  rad = 5

Grad of line from centre to  $(-4, -1) = -3/4$

$\therefore$  Grad of tangent =  $4/3$

Eqn of tangent  $y+1 = \frac{4}{3}(x+4)$

$y-y_1 = m(x-x_1)$

$3y = 4x + 13$