

16. (i) Verify that  $(2, 6)$  is on the line  $x - 2y + 10 = 0$ .  
(ii) If the line  $2x + ky - 12 = 0$  contains the point  $(3, 2)$ , find the value of  $k$ .

(i)	Sub in $(2, 6)$	$2 - 2(6) + 10 = 2 - 12 + 10 = 0$ $\Rightarrow$ is on line.
(ii)	Sub in $(3, 2)$ into $2x + ky - 12 = 0$	$2(3) + k(2) - 12 = 0$ $6 + 2k - 12 = 0$ $2k = 6$ $k = 3$