

8 (a) Solve.

$$10 - 3p = 3 + 11p$$

$$p = \dots\dots\dots [2]$$

(b) Make  $m$  the subject of the formula.

$$mc^2 - 2k = mg$$

$$m = \dots\dots\dots [3]$$

(c) Solve.

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

$$x = \dots\dots\dots \text{ or } x = \dots\dots\dots [5]$$

- (d) Solve the simultaneous equations.  
You must show all your working.

$$x + 2y = 12$$

$$5x + y^2 = 39$$

$$x = \dots\dots\dots y = \dots\dots\dots$$

$$x = \dots\dots\dots y = \dots\dots\dots [5]$$

- (e) Expand and simplify.

$$(2x - 3)(x + 6)(x - 4)$$

$$\dots\dots\dots [3]$$