

M1.

$x^2 + 6 \text{ or } (x - 3)^2$

M1

$x^2 - 3x - 3x + 9$

*4 terms with 3 correct***M1**

$6x < 3$

*oe linear inequality**dep on two quadratic expressions**ft their quadratic expressions***M1dep**

$x < 0.5$

*oe***A1****[4]****M2.**

(a) $x + y < 7$

B1

(b) $2y \geq x + 4$

B1**[2]**

$$\mathbf{M3.} 2x^2 + 3x - 1 = x + 4$$

$$2(y-4)^2 + 3(y-4) - 1 = 0$$

M1

$$2x^2 + 2x - 5 = 0 \quad \text{or} \quad 2x^2 + 2x = 5$$

M1dep

$$2y^2 - 14y + 19 = 0 \quad \text{or} \quad 2y^2 - 14y = -19$$

$$(x =) \frac{-2 \pm \sqrt{2^2 - 4(2)(-5)}}{2 \times 2}$$

Allow one error

M1dep

$$(x =) \frac{-2 \pm \sqrt{2^2 - 4(2)(-5)}}{2 \times 2}$$

$$\text{or} \quad \frac{-2 \pm \sqrt{44}}{4}$$

oe
fully correct

A1

$$(x =) 1.16 \text{ and } -2.16$$

$$(x =) 1.16 \text{ and } (y =) 5.16$$

or

$$(x =) -2.16 \text{ and } (y =) 1.84$$

A1

$$(x =) 1.16 \text{ and } (y =) 5.16$$

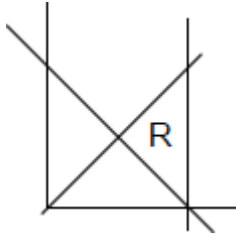
and

$$(x =) -2.16 \text{ and } (y =) 1.84$$

A1

[6]

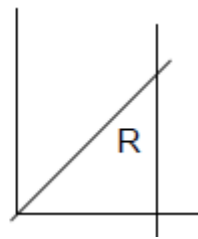
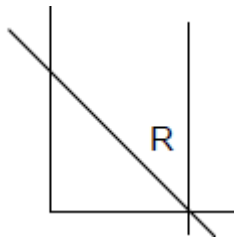
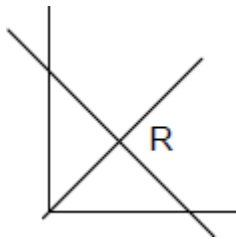
M4. All lines correct, drawn dashed / solid R marked



3 marks

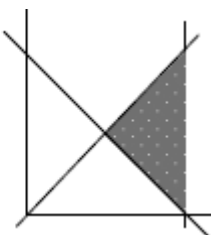
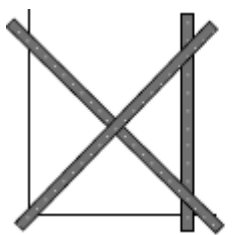
R marked correct relative to two correct, drawn dashed / solid lines

3rd line incorrect or missing



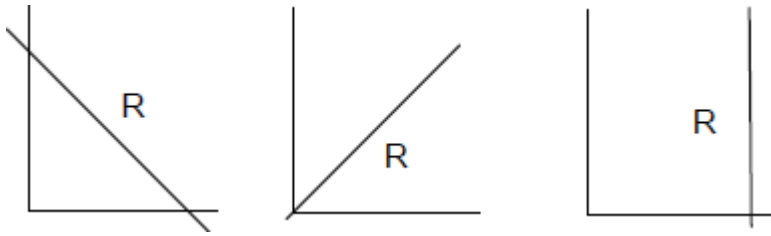
2 marks

All lines correct, drawn dashed / solid



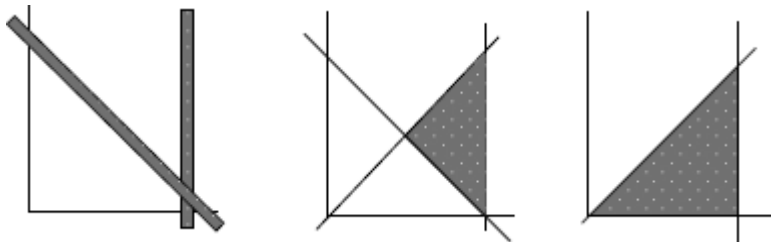
2 marks

R marked correct relative to one correct, dashed / solid line other lines incorrect or missing



1 mark

Two lines correct drawn dashed / solid

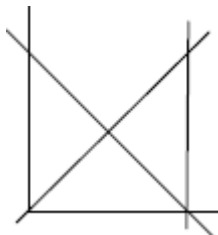


1 mark

All lines correct, drawn dashed / solid

No shading

R not marked



1 mark

[10]