Mark schemes

Q1.
(a)
$$-\frac{3}{2}$$
B1
(b) $\frac{4}{3}$
B1

[2]

Q2. y = 3x and y = 3x + 1 B1 y = 3x and y = 3x + 1 and one incorrect or y = 3x or y = 3x + 1 and none or one incorrect

[2]

B2

B1

Β1

Q3.

(C has coordinates) (2, 4)

(Gradient =) -2

Implied by
$$y = -2x \dots$$

$$\frac{-1}{\text{their gradient}} \operatorname{or} (\text{Gradient} =)^{\frac{1}{2}}$$

$$Implied by \neq \frac{1}{2} x \dots$$
M1

their 4 = their $\frac{1}{2}$ × their 2 + c or c = 3

1

oe

M1

A1ft

 $y = \frac{1}{2} x + 3$ $oe y \frac{1}{2} (x + 6)$ *ft their coordinates of C and their initial gradient if M1M1 scored*

Additional Guidance

(Gradient =) $\frac{1}{2}$ or $y = \frac{1}{2} x$... implies the second B mark and the first M mark.

Q4.

(Gradient of PQ =)
$$\frac{-4}{7}$$

Allow 0.57 or better for $\frac{4}{7}$

 $0 = \frac{-4}{7} \times 14 + K$ $(K =) 14 \times their \frac{4}{7} \text{ or } -14 \times their \frac{-4}{7} (= 8)$ 8 marked at the y-intercept ft non-integer gradient M1 $y = \frac{-4}{7}x + 8$

ft non-integer gradient

$$4x + 7y = 56$$

oe

ft their equation with a non-integer coefficient of x awarded

A1ft

[5]

B1

A1ft