

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

B2

[2]

Q3.

(C has coordinates) (2, 4)

B1

(Gradient =) -2

Implied by $y = -2x \dots$

B1

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

Implied by $y = \frac{1}{2}x \dots$

M1

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

oe

M1

$y = \frac{1}{2}x + 3$

oe $y = \frac{1}{2}(x + 6)$

ft their coordinates of C and their initial gradient if M1M1 scored

A1ft

Additional Guidance

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

[5]

Q4.

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

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

B1

$$0 = \frac{-4}{7} \times 14 + K$$

(K =) 14 × their $\frac{4}{7}$ 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

A1ft

$$4x + 7y = 56$$

oe

ft their equation with a non-integer coefficient of x and M1 awarded

A1ft

[4]