## Mark schemes

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

Q2.

$$
y=3 x \text { and }=3 x+1
$$

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

Q3.
(C has coordinates) (2, 4)
(Gradient =) - 2
Implied by $\ddagger-2 x$...
$\frac{-1}{\text { their gradient }}$ or (Gradient $\left.=\right)^{\frac{1}{2}}$
Implied by $\exists^{\frac{1}{2}} x$...

$$
\begin{aligned}
& \text { their } 4=\text { their } \\
& \text { or } c=3 \\
& \text { oe }
\end{aligned}
$$

$y=\frac{1}{2} x+3$
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 $y={ }^{\frac{1}{2}} x \ldots$ implies the second $B$ mark and the first $M$ mark.

Q4.
(Gradient of $P Q=$ ) $\frac{-4}{7}$
Allow 0.57 or better for $\frac{4}{7}$
$0=\frac{-4}{7} \times 14+K$
$(K=) 14 \times$ their $\frac{4}{7}$ or $-14 \times$ their $\frac{-4}{7}(=8)$
8 marked at the y-intercept
ft non-integer gradient
$y=\frac{-4}{7} x+8$
ft non-integer gradient
$4 x+7 y=56$
oe
ft their equation with a non-integer coeffician* offx awarded

