Question 7

The cost of a journey with Tom's Taxis depends on the distance travelled.
The graph below shows the cost, $P$ pounds, of a journey with Tom's Taxis against the distance travelled, $d$ miles.


Point A represents a journey of 8 miles which costs $£ 14$.
Point B represents a journey of 12 miles which costs $£ 20$.
(a) Find the equation of the line in terms of $P$ and $d$.

Give the equation in its simplest form.
(b) Calculate the cost of a journey of 5 miles.

Answers:
(a) $P=\frac{3}{2} d+2$ or $2 P=3 d+4$ or equivalent
(b) $£ 9.50$

