

2. (a) Draw the line with equation $y = 3x - 2$.
 (b) Draw a line parallel to $y = 3x - 2$ that passes through the point with coordinates $(0, 3)$
 (c) Determine the equation of the second line.

3. The equations of five lines are listed below.

A $y = 5x - 7$

B $y = 2x + 8$

C $y = 3x + 3$

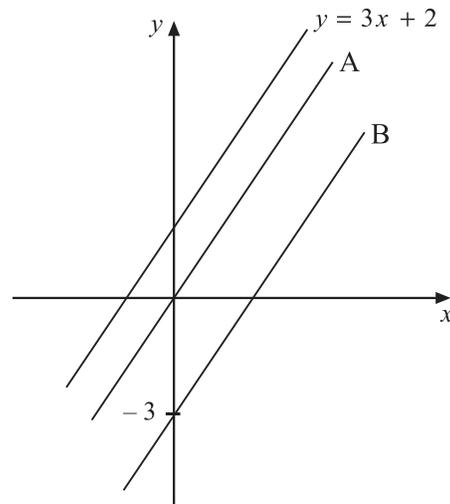
D $y = 3x - 8$

E $y = 5x + 2$

- (a) Which line is parallel to A?
 (b) Which line is parallel to C?
 (c) Are there any lines parallel to B? Explain why.

4. The diagram shows the line with equation $y = 3x + 2$ and two other lines, A and B, parallel to it.

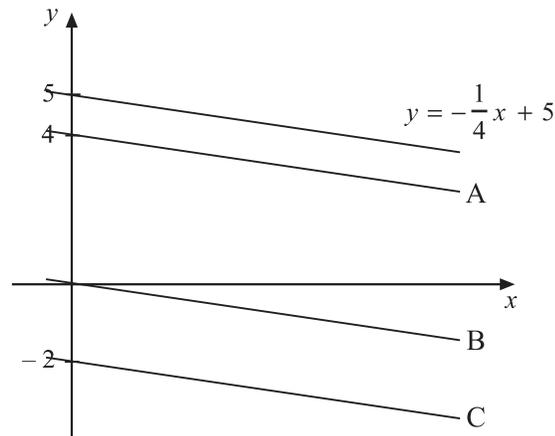
- (a) What is the *gradient* of the line A?
 (b) What is the *equation* of the line A?
 (c) What is the *equation* of the line B?



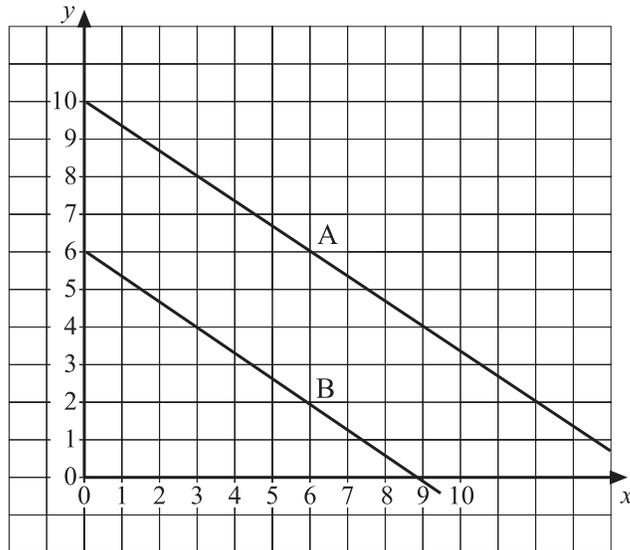
5. The diagram shows the line with equation $y = -\frac{1}{4}x + 5$, and three other parallel lines.

What is the equation of:

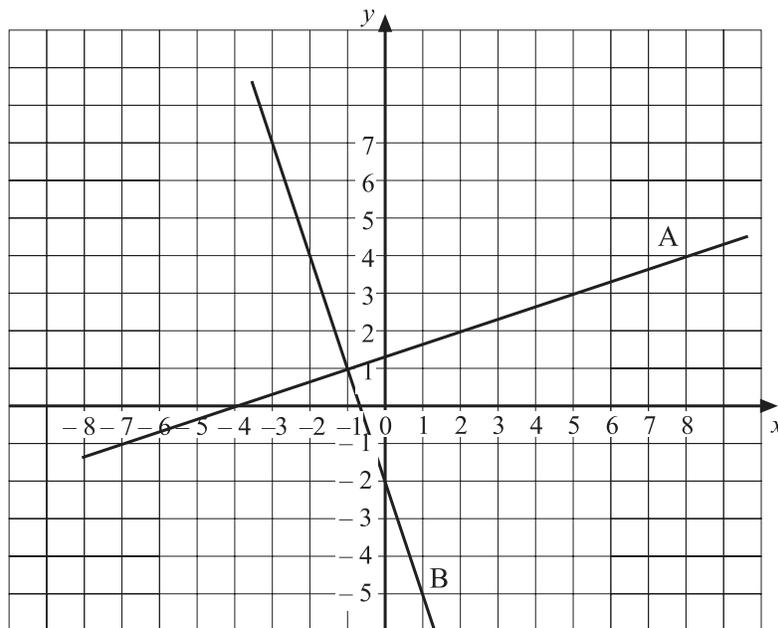
- (a) line A,
 (b) line B,
 (c) line C?



6. The graph shows two lines, A and B.



- Calculate the *gradient* of the line A.
 - What is the *equation* of the line A?
 - What is the *equation* of the line B?
7. The graph shows two lines, A and B.



- Calculate the *gradient* of A.
- Calculate the *gradient* of B.
- Explain why the lines are *perpendicular*, using your answers to (a) and (b).