## Year 10 Mathematics Linear Relationships Practice Test 2

1 Does the point $(3,1)$ lie on the line shown below?


2 What is the gradient of the line $y=-2 x+4$
3 Which of the four lines below has the smallest gradient


4 Which of the four lines below has a negative gradient?


5 The gradient of a line is $\frac{2}{3}$. What is the gradient of any line parallel to it?
6 Write $y=-3 x-5$ in general form

7 Write the equation of the line with gradient -2 and $y$ intercept 5

8 What is the gradient of this line


9 Plot the point ( $-2,2$ ) on the number plane (1 mark)


10 A line was drawn through the following points

$$
(0,0) \quad(1,2) \quad(2,4) \quad(3,6) \quad(4,8)
$$

Its equation would be $\mathrm{y}=$

11 What is the equation of this line? (1 mark)


12 For the points $\mathrm{A}(2,4)$ and $\mathrm{B}(8,12)$
Find
a) The midpoint of AB
b) The distance AB (
c) The gradient of the line connecting AB

13 For the graph below
a) State the $y$ intercept
b) Calculate the gradient
c) Write the equation of the line in the form $y=m x+b$ (1 mark)


14 Write the equation of the line with gradient $\mathrm{m}=2$ and y intercept $\mathrm{b}=-5$

