EQUATION OF A LINE

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1.	2, (1, 3)	2.	3, (0, 4)
3.	1, (2, 2)	4.	4, (1, 5)
5.	-1, (3, 2)	6 .	0, (5, 3)
7.	-3, (1, 4)	8.	2, (-1, 3)
9.	-2, (-3, 1)	10.	5, (-2, -1)
11.	$frac{1}{2}, (4, 3)$	12.	\frac{3}{4}, (8, 2)
13.	-\frac{1}{3}, (6, 3)	14.	$frac{2}{5}, (5, 1)$
15.	-\frac{3}{2}, (4, -2)	16.	$frac{1}{3}, (frac{1}{2}, 1)$
17.	\frac{2}{7}, (\frac{3}{4}, \frac{1}{2})	18.	-\frac{5}{2}, (-\frac{1}{2}, \frac{3}{4})
19.	\frac{3}{5}, (\frac{2}{3}, \frac{4}{5})	20.	$frac{5}{3}, (frac{7}{3}, 2)$

MASTER QUESTIONS

M1. A straight line has gradient 4 and passes through (1, 5). Write its equation.



- M2. Find the equation of a line with gradient -3 passing through (2, 4).
- M3. The gradient of a line is 0 and it passes through (5, 7). What is its equation?
- M4. A line has gradient $frac{1}{2}$ and passes through (4, 5). Find its equation.
- M5. A hill has gradient $frac{1}{5}$ and passes through (10, 20) on a map. Write the equation for height y against horizontal distance x.
- M6. A car travels at 50 mph. After 2 hours it has covered 100 miles. Write an equation for distance d against time t.
- M7. A taxi charges £2.50 per mile plus a fee. At 4 miles the cost is £13.00.Write an equation for cost C against miles m.
- M8. A line passes through (3, -1) with gradient -2. Find its equation.
- M9. A solution's temperature rises at 1.2°C/min. At 5 minutes it is 20°C. Write an equation for temperature T against time t.
- M10. A line has gradient $frac{4}{5}$ and passes through the origin. Write its equation.