

National 5	Rigour Tasks
Straight Line gradients and intercepts	

For each equation below, find:

- a) The gradient
- b) The coordinates of the  $y$  – intercept

1. $y = 5x + 2$	2. $y = -3x + 2$	3. $y = -2x - 9$	4. $y = 4x - 5$
5. $y = 7 - x$	6. $y = 21 - 4x$	7. $y = 5 - 4x$	8. $y = 9 - 11x$
9. $5y = 10x + 20$	10. $4y = 2x - 8$	11. $7y = 21x + 35$	12. $3y = -6x + 9$
13. $2x + 5y = 10$	14. $5x + 2y = 20$	15. $3x + 8y = -8$	16. $9x + 2y = 10$
17. $3x + 2y - 12 = 0$	18. $4x + 3y + 9 = 0$	19. $x - 5y - 15 = 0$	20. $3x - y - 8 = 0$
21. $8x - 5y - 10 = 0$	22. $9x + 2y + 14 = 0$	23. $2x + 7y + 7 = 0$	24. $4x - 3y + 12 = 0$

For each of these equations, state the coordinates of the points where they cut BOTH axes:

25.  $2x + 5y - 10 = 0$     26.  $4x + 2y + 12 = 0$     27.  $5x - y - 15 = 0$     28.  $9x - 3y + 18 = 0$