PLOTTING STRAIGHT GRAPHS

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

MAIN QUESTIONS

1. $y = x + 1$ | Gradient: 1, y-intercept: 1

2. $y = 2x + 1$ | Gradient: 2, y-intercept: 1

3. $y = 3x + 1$ | Gradient: 3, y-intercept: 1

4. $y = x + 2$ | Gradient: 1, y-intercept: 2

5. $y = 2x + 2$ | Gradient: 2, y-intercept: 2

6. $y = 3x + 2$ | Gradient: 3, y-intercept: 2

7. $y = x - 1$ | Gradient: 1, y-intercept: -1

8. $y = 2x - 1$ | Gradient: 2, y-intercept: -1

9. $y = 3x - 1$ | Gradient: 3, y-intercept: -1

10. $y = -x + 1$ | Gradient: -1, y-intercept: 1

11. $y = -2x + 1$ | Gradient: -2, y-intercept: 1

12. $y = -3x + 1$ | Gradient: -3, y-intercept: 1

13. $y = -x + 2$ | Gradient: -1, y-intercept: 2

14. $y = -2x + 2$ | Gradient: -2, y-intercept: 2

15. $y = -3x + 2$ | Gradient: -3, y-intercept: 2

16. $y = -x - 1$ | Gradient: -1, y-intercept: -1

17. $y = -2x - 1$ | Gradient: -2, y-intercept: -1

18. $y = -3x - 1$ | Gradient: -3, y-intercept: -1

19. $y = 0x + 3$ | Gradient: 0, y-intercept: 3

20. $y = 2x + 0$ | Gradient: 2, y-intercept: 0

MASTER QUESTIONS

M1. A line has a gradient of 2 and passes through the point (0, 3). Write its equation.

$y = 2x + 3$

M2. The cost C in pounds of hiring a bike for d days is £10 plus £5 per day. Write the equation for C in terms of d.

$C = 5d + 10$

M3. A car travels at a constant speed of 60 km/h. Write an equation for the distance s in kilometres against time t in hours.

$s = 60t$

M4. The temperature decreases by 2 degrees every hour. If at t=0 hours it is 20 degrees, write the equation for temperature T against time t.

$T = -2t + 20$

M5. A straight line passes through the points (1, 2) and (3, 4). Find its equation.

$y = x + 1$