

FY Starter 11/12

Malvern College

1: Simplify the following:

$$6j^2 + 3j + 6 + 10j^2 + 5j + 7$$

2: Simplify the following:

$$-5z^2 - 9z - 4 - 7z^2 + 10z - 8$$

3: Multiply out and simplify the following:

$$3(5k - 1) + 4(2k + 6)$$

4: Multiply out and simplify the following:

$$10(8w + 6) - (5w - 2)$$

5: Factorise the following:

$$72p - 63$$

6: Factorise the following:

$$35u^2 + 14u$$

7: Factorise the following:

$$18h^2 - 60hg$$

8: Solve the following:

$$57 = 8x + 1$$

9: Solve the following:

$$\frac{b - 12}{2} = -2$$

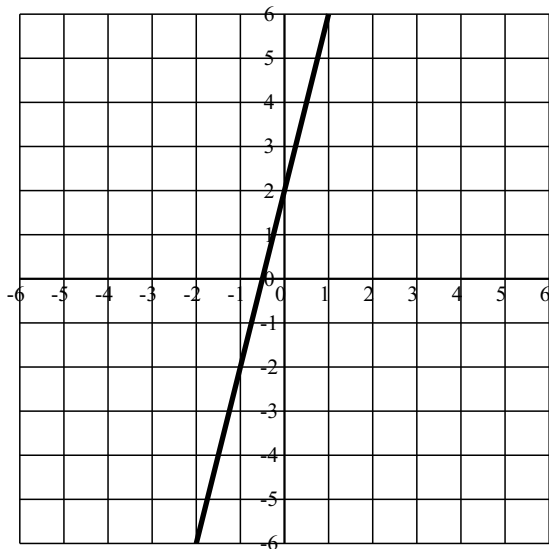
10: Solve the following:

$$6y + 25 = 9y + 10$$

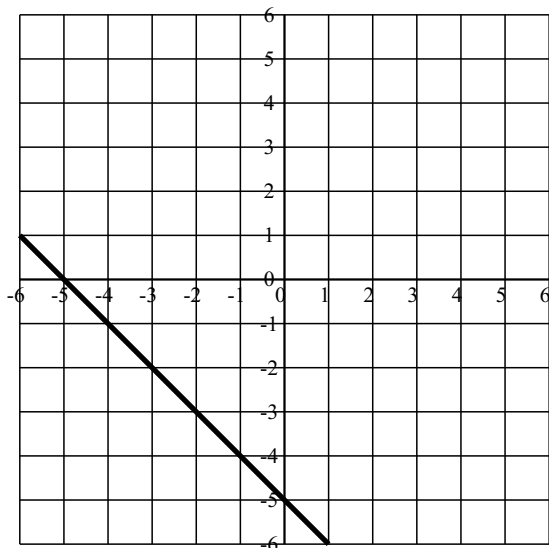
11: Find a formula for the n th term:

$$13, 23, 33, 43, 53, \dots$$

12: Give an equation for the graph:



13: Give an equation for the graph:



Answers: FY Starter 11/12

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1: $16j^2 + 8j + 13$

2: $-12z^2 + z - 12$

3: $15k - 3 + 8k + 24 = 23k + 21$

4: $80w + 60 - 5w + 2 = 75w + 62$

5: $9(8p - 7)$

6: $7u(5u + 2)$

7: $6h(3h - 10g)$

8: $8x + 1 = 57$ [$- 1$]
 $8x = 56$ [$\div 8$]
 $x = 7$

9: $\frac{b - 12}{2} = -2$ [$\times 2$]
 $b - 12 = -4$ [$+ 12$]
 $b = 8$

10: $9y + 10 = 6y + 25$ [$- 6y$]
 $3y + 10 = 25$ [$- 10$]
 $3y = 15$ [$\div 3$]
 $y = 5$

11: $t_n = 10n + 3$

12: $y = 4x + 2$

13: $y = -x - 5$