

Answers to N5 Booster Paper A1



1. $3x^3 - 7x^2 + 11x - 3$

2. $9\frac{1}{15}$

3. 730.8

4. Angle ABC = 30°

5. (a) $6(2x - 3)$ (b) $(x - 5)(x + 5)$

6. $(x - 3)^2 + 2$

7. $k = 9y^2 - 7$

8. 300 grams

9. $8x^{15}$

10. (a) A(-5,0) B(4,0) (b) C(0,-20)

11. (a) $-\frac{5}{2}$

(b) $2y = -5x - 1$ or $y = -\frac{5}{2}x - \frac{1}{2}$ or equivalent

(c) $\left(0, -\frac{1}{2}\right)$

12. (a) $\sqrt{3}$ (b) $5\sqrt{3}$

13. (a) $3r + 2t = 9.4$

(b) $2r + 4t = 8.4$

(c) One rose costs £2.60 and one tulip costs 80 pence

14. (a) $A = l \times b = (x + 4)(x - 1) = x^2 - x + 4x - 4 = x^2 + 3x - 4$ as required

(b) $x = 2$, ~~$x = -5$~~ since $x > 1$