

Answers to N5 Booster Paper A2



1. £16822.70

2. 4.5×10^8

3. (a) Mean = 6.97 metres Standard deviation = 0.11 metres

(b) On average, the top 6 athletes in the Rio final jumped a greater distance than those in the Athens final ($7.02 > 6.97$)

The distances jumped by the top 6 athletes in the Athens games were more consistent than those jumped in Rio ($0.11 < 0.14$).

4. $x = -2$

5. 8.67 centimetres (2 d.p.)

6. £45

7. $2x^6$

8. 130°

9. “Two equal real roots” or “One repeated real root”

10. 50 cm^2

11. (a) $x = 3$ metres (b) 0.5 metres

12. $13.5^2 = 182.25$

$8.1^2 + 10.8^2 = 182.25$

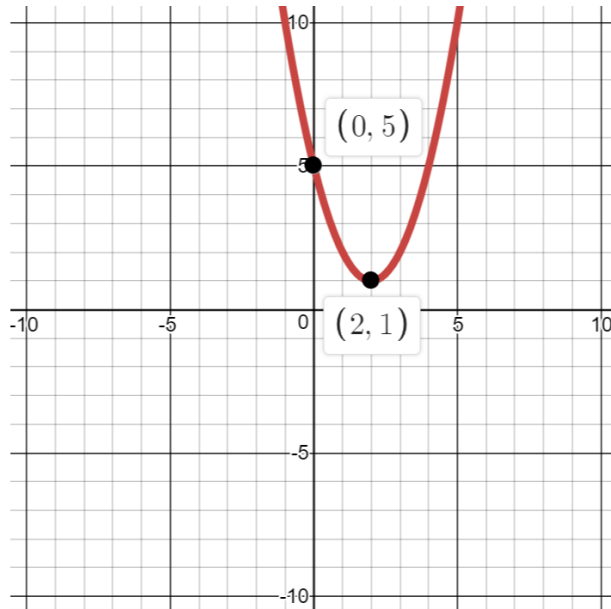
Since $13.5^2 = 8.1^2 + 10.8^2$ then, by the converse of Pythagoras’ Theorem, the triangle is right angled and the set square is acceptable.

13. $x = -3.91, x = 1.41$

14. $x = -\frac{5}{8}$

15. $a = 3, b = 2, c = 1$

16. (a) $(2,1)$
(b) $x = 2$
(c) $(0,5)$
(d)



17. (a) 16.5 cm^3 (b) 4 centimetres