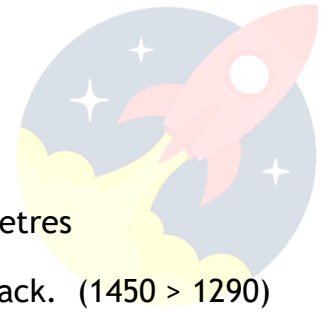


Answers to N5 Booster Paper D2

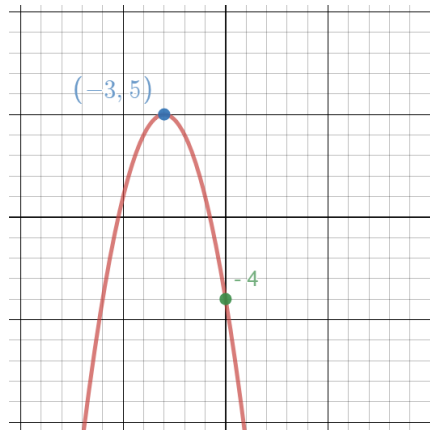


1. $x = 123.7^\circ, 303.7^\circ$
2. 10.8 metres
3. (a) mean = 1290 metres standard deviation = 65.2 metres
(b) On average, Mr Campbell ran further per day on the track. ($1450 > 1290$)

The distances run by Mr Campbell on the machine were more consistent.
($65.2 < 75$)
4. $x = \frac{13}{10}$ or 1.3
5. (a) $AD = p + r$ (b) $AE = p + r - q$
6. £50000
7. $2x^2 + 6x$
8. 2138 square centimetres
9. $k > 9$
10. 315 cm^2
11. 3.14 centimetres (1 decimal place)
12. 101.1 kilometres
13. $x = 0.839, x = -0.239$
14. $x = \frac{3}{8}$
15. $a = -3, b = 2, c = 1$

Turn over...

16. (a) $(-3, 5)$
 (b) $x = -3$
 (c) $(0, -4)$
 (d)



17. $BC = 18 \text{ cm}$

$$\sin x(\sin x + 1) + \cos x(\cos x + 1) - 1$$

18. $= \sin^2 x + \sin x + \cos^2 x + \cos x - 1$
 $= \sin x + \cos x + 1$

since $\sin^2 x + \cos^2 x = 1$

- 19.

