



**KS3/GCSE MARK SCHEME**

1. 16
2. 42 Award 2 marks for correct answer, 1 mark for sight of 7 or for method of  $0.6 \times 70$  or  $70 \times 60 / 100$
3.  $5/12$  Award 2 marks for correct answer or 1 mark for seeing  $8/12 - 3/12$  or equivalent
4.  $3/9$  or equivalent eg  $1/3$
5. a) 350, b) 60, c) 7.2, d) 140
6. Top label: tangent, left label: radius, right label: diameter
7. a) 3, b) 4.5 or  $4 \frac{1}{2}$  (give 1 Mark if they put the numbers in order or right both 4 and 5 as the answer), c) 5 (give 1 mark if they have attempted the correct method of adding the numbers together and then dividing by 8)
8. a) 53, b) there are 180 degrees in a straight line
9. a) e, b) b, c) a, d) f
10. a) 12 (give 1 Mark for sight of 8 and 4 or for the method of  $0.15 \times 80$  be in t used), b) 35 (give 1 Mark if they have shown that  $1/6$  is equal to 7. This could be in a bar diagram)
11. Train goes = 27 Give a mark each for each of these - Men:  $1/5$  of 60 = 12, Women  $1/3$  of 45 = 15
12. 1 mark for working out either 20% of £80 (£16) or  $1/3$  of £90 (£30). Then give an extra mark for each sale price calculated (Shop A: £64, Shop B: £60). Final mark for stating that it is cheapest in Shop B. Do not give any marks for saying shop B unless the working clearly justifies their decision
13. a)  $3m^2 + m$  (allow 1m), b)  $5p + 3q$  (give one mark for each part), c)  $6a + 3c - 10$  (give 1 Mark for sight of either  $12a + 3c$  or  $6a - 10$ )
14. 14 (Give one mark if they substitute at least 1 value correctly into the nth term. Eg  $n=2$ .  $2 \times 2(2-6) = 4 \times (-4) = -16$ ), b)  $4n + 7$  (give 1 Mark for  $4n$  by itself or plus or minus a number)
15. a)  $t=3$ , b)  $x=8$ , c)  $w=3$  (give one mark if they have taken away the 2 from the 20)
16. **600g**. One mark for  $50 \times 4 = 200$  grams of sugar for 60 biscuits. One mark for attempting to multiply  $200 \times 3 = 600g$  or  $50 \times 3 = 150g$
17. 23 One mark for 35 and 12 or -12
18. 3240. One mark for  $90 \times 60$ . One mark for  $5400(m^2)$ . One mark for attempting to find 60% or 40% of whatever area they work out with a valid method.
19. £168. One mark for working out that Chloe and Denesh each get 3 parts of the ratio. One mark for dividing 360 by 15 or for sight of 24. One mark for  $24 \times 7$ .
20. 50mph. 1 mark for working out a time difference of 1 hour 18 minutes or 78 minutes. 1 mark for attempting to work out the speed using ratio tables or 65 divided 1.3.

65 miles in 78 min

5 miles in 6 min

50 miles in 60 min



21. £420. 1 mark for correct multiplications to find the area. 1 mark for an area of 126 square metres. 1 mark for  $126/1.5$  or for counting up in 1.5's. 1 mark for 84. 1 mark for  $84 \times £5 = £420$
22. 320.4cm. 1 mark for finding the circumference of one of the layers. Eg.  $40 \times 3.141 = 125.64$ . 1 mark for calculating the diameter of at least one of the other layers (34cm and 28cm). 1 mark for finding both of their circumferences (106.79cm and 87.95cm). 1 mark for attempting to add them all together.

**TOTAL MARKS: 61**