



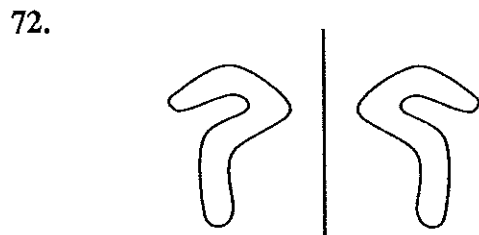
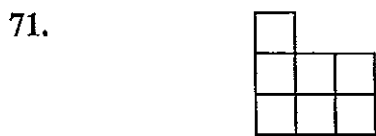
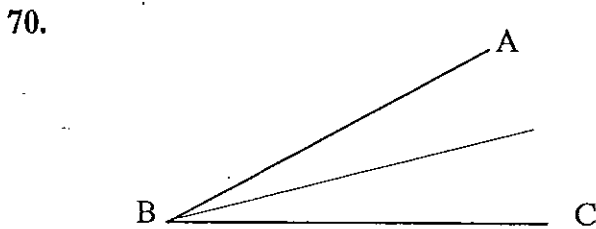
PRACTICE PAPER 3 SCHOOL CERTIFICATE TEST SOLUTIONS

Section 1

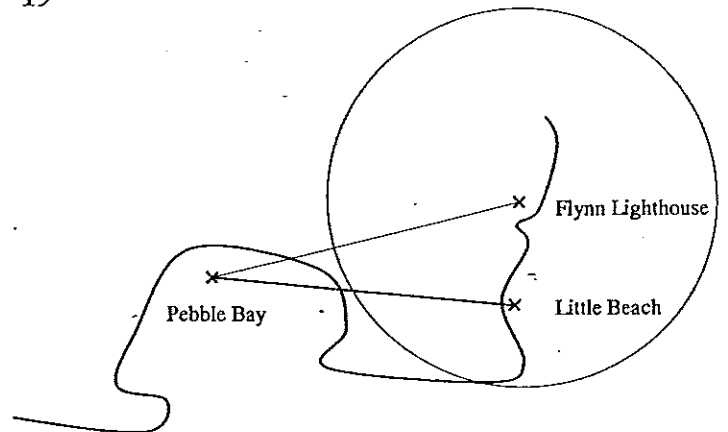
- | | | | | |
|------|-------|--------------|--------------|-------------|
| 1. D | 6. A | 11. A | 16. 24 | 21. 80mL |
| 2. A | 7. C | 12. D | 17. \$134.40 | 22. 110 |
| 3. D | 8. A | 13. 9:12am | 18. 396°C | 23. B, D |
| 4. C | 9. B | 14. \$369 | 19. \$6.50 | 24. B, C |
| 5. C | 10. D | 15. 9 and 10 | 20. \$1.90 | 25. A, C, D |

Section 2 – Part A

- | | | | | |
|-------|-------|------------|------------------------|-------------|
| 26. B | 35. B | 44. C | 53. 60min | 62. 2.5cm |
| 27. C | 36. D | 45. B | 54. 6 | 63. \$9820 |
| 28. B | 37. B | 46. D | 55. 6 | 64. 14.8cm |
| 29. C | 38. B | 47. B | 56. 11:40am | 65. C, D |
| 30. C | 39. C | 48. B | 57. 21km/h | 66. A, B, C |
| 31. A | 40. A | 49. C | 58. 54g | 67. C, D |
| 32. B | 41. C | 50. D | 59. 8µm | 68. A, D |
| 33. D | 42. D | 51. 1007mm | 60. 2:7 | 69. A, D |
| 34. B | 43. B | 52. 339° | 61. 240cm ² | |



73. 19°



74. 17km

75. on diagram above.

SECTION 2 – PART B

Question 76

- (a) $5 + 7 + 2 + 10 + 4 = 28$ sparrows
 (b) **Thursday**
 (c) $28 \div 5 = 5.6$ sparrows
 (d) $\frac{5}{28} \times 100 = 17.9\%$
 (e) $\frac{2}{28} \times 20 = 1.4\text{cm}$

Question 77

- (a) speed = $\frac{40\text{km}}{1\frac{1}{3}\text{h}}$
 $= 30\text{km/h}$
 (b) time = $\frac{50\text{km}/\text{h}}{30\text{km}}$
 $= 1\text{ h } 40\text{ min}$
 (c) time = $\frac{50\text{km}}{36\text{km}/\text{h}}$
 $= 83\text{ minutes } 20\text{ seconds}$
 (d) time_{1st 25km} = 30 minutes
 \therefore time left over = 1.5h
 Now speed = $\frac{25\text{km}}{1.5\text{h}}$
 $= 16\frac{2}{3}\text{km/h}$

- (e) Total times = 22 150 seconds.
 But it's easier to average times above 1:12:00.
 ie $34 + 38 + 135 + 171 + 172 = 550$ seconds
 and $550 \div 5 = 110$ s
 so average = **1h 13min 50s**
 (even easier to use ° ‘ “ button on calculator!)

Question 78

- (a) $\frac{25}{175} \times \frac{100}{1} = 14\%$
 (b) $500\text{g} \div 75\text{g} = 6.7$ servings (1 d.p.)
 (c) $6\% \times 150\text{g} = 9\text{g}$
 (d) $17\ 000 \div 2280 = 8$ full servings needed
 (e) Watts per day = 216×24
 $= 5184$
 No. of light bulbs = $17\ 000 \div 5184$
 $= 3.3$ lights (1 d.p.)

Question 79

- (a) $V = p(59.5)^2 - p(7.5)^2$
 $= 10\ 945\ \text{mm}^3$ (2 marks)
 (b) $10\ 945 \div 1000 = 10.945\text{cm}^3$
 (c) $2.5 \times 2.5 \times 2 = 12.5\text{cm}^3$
 (d) Excess = $12.5 - 10.945$
 $= 1.555$
 Recycled volume = 1.555×5350
 $= 8319.25\text{cm}^3$

Question 80

- (a)

Length	1	2	3	4	5	6
Number of braces	0	1	2	3	4	5
- (b) **11 braces**
 (c) $l = b + 1$
 (d) length = 0.4×144
 $= 57.6\text{m}$
 (e) Cost = $57.6 \times 1.1 \times \$3.48$
 $= \$220.49$