

School Certificate Mathematics Answers 2001

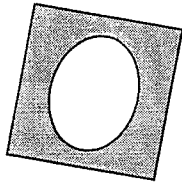
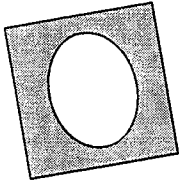
These answers are suggested only. In some cases other answers may be acceptable.

1. 28.6494
2. 5.64732
3. $2+3=5$
4. any fraction between $\frac{1}{4}$ and $\frac{1}{2}$ eg $\frac{1}{3}$
5. 0.09
6. 3
7. 1:05
8. 0.2
9. any arrangement with 4 in the middle and pairs 1, 7 and 2, 6 and 3, 5 on the opposite ends of the same arm, OR 1 in middle and 2, 7 and 3, 6 and 4, 5 OR 7 in the middle and 1, 6 and 2, 5 and 3, 4

10. 70°

11. \$6

12.



13. 62 – middle or in this case average of 2 mid marks
14. 30% (\$120)
15. a polygon with 8 sides and 8 angles (should not say equal because regular not mentioned)
16. 70
17.

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Chomper ↑

Gnawer ↗

Chewy ↗

Nibbles ↗

Grinder ↗
18. $\frac{4}{13}$ is the basic fraction so any variations – most likely $\frac{8}{26}$
19. 270 times

20. $98 \times 100 + 1 = 9801$
21. 6 sheep – 15 animals (heads) 2 legs each is 30 – 12 more legs in pairs is 6 animals can have 4 legs each
22. 69, 72, 75, 78, 81 – middle will be average with equal ones above and below
23. parallelogram will be 7 squares across and 3 high or 3 across and 7 high but should not be a rectangle
24. \$16 – Sam 8, Julie 32, Fred 16
25. Compass set length AB and arcs drawn centres A and B. Crossover joined to A and B
26. B
27. D
28. D
29. C
30. C
31. D
32. B
33. A
34. A
35. C
36. C
37. C
38. B
39. B
40. B
41. A
42. B
43. C
44. A
45. A
46. B
47. B
48. D
49. C
50. C
51. D
52. B
53. B
54. A
55. C

<p>variations – most likely 8/26 19. 270 times</p>	
<p>56. D 57. B 58. C 59. B 60. A 61. D 62. D 63. C 64. B 65. C 66. C 67. B 68. C 69. D 70. D 71. A 72. A 73. C 74. B 75. D 76. A, C 77. B 78. B, C, D 79. A, C 80. A, D 81. a) 28.44m^2 (2 marks, 1 for calculation, 1 for conversion to metres) b) 2 litres c) 4 litre can d) 2 litre can, all he needs better than 2 x 1 litre 82. a) $(4 \times 4) \div (14 \times 5.5) \times 100 = 21\%$ b) $\pi(1.5 \times 3)^2 = 64\text{m}^2$ c) $(3.5+3.5) \times 3 \times \\$85.5 = \\$1795.50$ d) $64 \times 1.5 \times 100 \times 100 \times 100 \div 1000 = 96000$ litres (2 marks, 1 if mostly correct figures, note some students may use exact figure not 64 as rounded in b) 83. a) 4 must round up b) $185 + 4 \times 450 + 168 \times 5 = \\2825 c) $(2825 - 40) \div 160 = \\17.40 d) $(185 + 3 \times 450 + 150 \times 5) \div 150 = \\15.23 (2 marks, 1 for 1 less bus)</p>	<p>84. a) 5.7cm BO is a radius 8cm AB=AO, sides of a square AB = 5.656 Pythagoras 2 marks b) each triangle 2 radii and a pair of equal sides (given) SSS 2 marks c) 135° – 2 radii – triangle is isosceles – 2 angles each 22.5° other angle 135°.</p>