St. Francis' College Practice Entrance Examination for entry into Year 9 – Answers

1. a) 0.07 b) 11 c) 4783m d) 29 e) 0.016

   f) Isosceles g) 30 h) 35 mins i) 27.5% j) 12/25

   k) 169 l) 18 m) 1200mm^2

2. a) a = 45^0 b = 135^0 c = 73^0

   b) a = 32^0 b = 82^0 c = 98^0 d = 82^0 e = 32^0

3. a) £504 b) 15%

4 a) 1/4 b) 3/4 c) 11/20

5. a) 41/63 b) 1 7/55

6. a) 5 faces, 8 edges and 5 vertices

   b) square based pyramid

7. a) 16 m^2 b) 108 cm^2 or 10800 mm^2 c) 108 m^2

8. a) 30 b) 2

9. a) $10xy - 15x^2$ b) $17r - 31$

10. a) 2.18 b) 20.0

11. a) x = 8 b) x = -3 c) x = 5/3 or 1 2/3

12. Milly 91 biscuits, Tilly 13 biscuits

13. a) 3 1/3 (100 ÷ 30) b) 4 c) 7

14. 480 cm^3

15. a) horizontal line cutting through 3 on the y-axis

    b) vertical line cutting through -5 on the x-axis

    c) diagonal line going from (-6, 6) to (6 , -6)

16. term 6 has value 40
value 68 has term 10
term n has value 7n – 2

17. a) $10x = 4x + 12$

b) $x = 2$ perimeter is 20m

c) first lawn has length 6m and width 4m
second lawn has length 8m and width 2m.

18. a) (1, -1) (1, -3) (2, -1)

b) (-1, 1) (-1, 2) (-3, 1)

c) (-5, -2) (-5, -3) (-3, -3)

19. a) 345 b) 16.284

20. 4

21. 393 miles

22. 24 (2, 7 and 31)

23. 5 : 4