

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<sup>2</sup>
2. a)  $a = 45^{\circ}$        $b = 135^{\circ}$        $c = 73^{\circ}$   
b)  $a = 32^{\circ}$        $b = 82^{\circ}$        $c = 98^{\circ}$        $d = 82^{\circ}$        $e = 32^{\circ}$
3. a) £504      b) 15%
4. a)  $\frac{1}{4}$       b)  $\frac{3}{4}$       c)  $\frac{11}{20}$
5. a)  $\frac{41}{63}$       b)  $1\frac{7}{55}$
6. a) 5 faces, 8 edges and 5 vertices  
b) square based pyramid
7. a) 16 m<sup>2</sup>      b) 108 cm<sup>2</sup> or 10800 mm<sup>2</sup>      c) 108 m<sup>2</sup>
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)  $x = \frac{5}{3}$  or  $1\frac{2}{3}$
12. Milly 91 biscuits, Tilly 13 biscuits
13. a)  $3\frac{1}{3}$  ( $100 \div 30$ )      b) 4      c) 7
14. 480 cm<sup>3</sup>
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