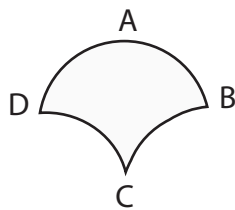


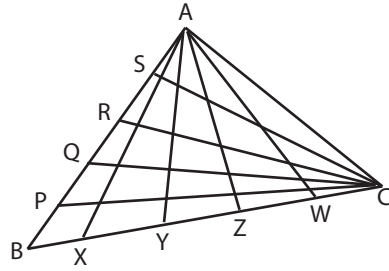
Practice Pascal Number 2

1. If fence posts are 2m apart how many posts are required to completely fence a rectangular lot which is 20 m by 12 m.
a) 30 b) 31 c) 32 d) 34 e) 36
2. If 1.8% of a number is 540, then the number is
a) 9.72 b) 972 c) 300 d) 3000 e) 30000
3. Find the sum of the reciprocals of all positive integral factors of 6, including both 1 and 6.
a) $\frac{11}{6}$ b) $\frac{5}{3}$ c) $\frac{3}{2}$ d) 2 e) 3
4. If the line segment from $A(3, 4)$ to $B(x, y)$ has its midpoint on the x axis then which of the following must be true?
a) $x = -3$ b) $x = -6$ c) $x = -3$ and $y = -4$ d) $y = -4$ e) $y = -8$
5. If the ratio $x : y = 2 : 3$ and the ratio $y : z = 5 : 8$ what is the ratio $x : z$?
a) 1:2 b) 1:4 c) 5:12 d) 1:3 e) 3:5
6. If $3^{10} + 3^{10} + 3^{10} = 3^k$ then k equals
a) 30 b) 11 c) 27 d) 12 e) 1000
7. If each edge of a rectangular prism is increased by 20%, what is the percentage increase in its volume?
a) 20% b) 40% c) 44% d) 60% e) 72.8%
8. The figure $ABCD$ shown in the diagram consists of 4 quarter circle arcs AB , BC , CD and DA , each of radius 4. What is the enclosed area?



- a) 4π b) 16π c) $64 - 16\pi$ d) $16\pi - 32$ e) 32
9. The product of the ages of three children is 1872. The age of the middle child is the average of the ages of the other two children. What is the sum of their ages?
a) 18 b) 26 c) 34 d) 39 e) 42

10. In triangle ABC points $X, Y, Z,$ and W are chosen on BC and each is joined to A . Points $P, Q, R,$ and S are chosen on AB and each is joined to C . How many triangles are in the resulting diagram including the original triangle ABC ?



- a) 75 b) 90 c) 100 d) 125 e) 150