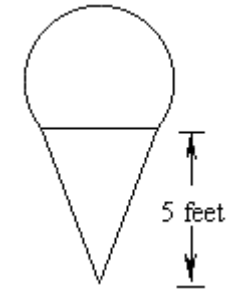
1

If the perimeter of square region S and the perimeter of rectangular region R are equal and the sides of R are in the ratio 2:3 then the ratio of the area of R to the area of S

A. 25:16
B. 24:25
C. 5:6
D. 4:5
E. 4:9

2



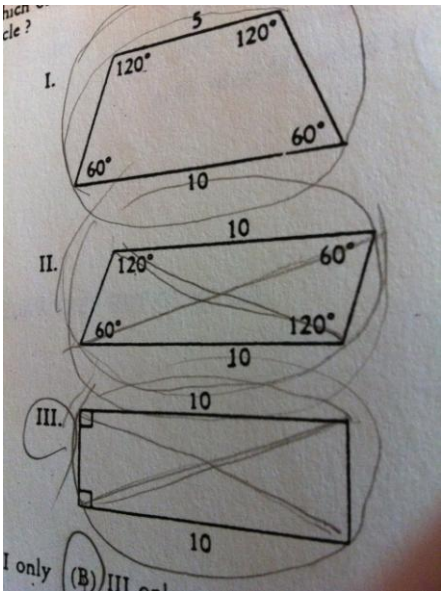

The outline of a sign for an ice-cream store is made by placing 3/4 of the circumference of a circle with radius 2 feet on top of an isosceles triangle with height 5 feet, as shown above. What is the perimeter, in feet, of the sign?

(A) 3pi + 3 sqrt 3
(B) 3pi + 6 sqrt 3
(C) 3pi + 3 sqrt 33
(D) 4pi + 3 sqrt 3
(E) 4pi + 6 sqrt 3

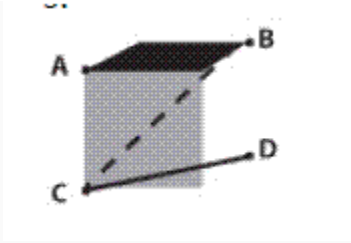
3

Which of the figures below can be inscribed in a circle?

A. 1 only
B. 3 only
C. 1 & 3 only
D. 2 & 3 only
E. 1, 2 & 3



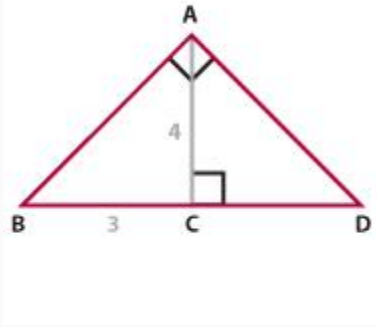
4




If the box shown is a cube, then the difference in length between line segment BC and line segment AB is approximately what fraction of the distance from A to C?

A. 10%
B. 20%
C. 30%
D. 40%
E. 50%

5




In triangle ABC, if BC = 3 and AC = 4, then what is the length of segment CD?

A. 3
B. 15/4
C. 5
D. 16/3
E. 20/3