

## CSS General Abilities Chapter 3 Online Entry Test

Sr	Questions	Answers Choice
1	A cyclic quadrilateral whose opposite angles are equal, is a :	A. parallelogram but not a rhombus     B. rhombus     C. rectangle     D. square but not a rectangle
2	What is the area of a circle whose radius is the diagonal of a square whose area is 4?	A. $2\pi$ B. $2\pi\sqrt{2}$ C. $4\pi$ D. $8\pi$
3	If A is the area and C the circumference of a circle, which of the following is an expression for A in terms of C?	A. C <sup>2</sup> /4π B. C <sup>2</sup> /4π <sup>2</sup> C. 2C D. 2C <sup>2</sup> √π
4	The circumference of a circle of $a\pi$ units, and the area of the circle is $b\pi$ square units. If $a$ = $b$ , what is the radius of the circle ?	A. 1 B. 2 C. 3 D. π
5	Question Image	A. 15 B. 30 C. 45 D. 54
6	A 5 $\times$ 12 rectangle is inscribed in a circle. What is the radius of the circle ?	A. 6.5 B. 7 C. 8.5 D. 13
7	A square of area 2 is inscribed in a circle. What is the area of the circle?	A. π/4 B. π/2 C. π D. π√2
8	What is the area of a circle that is inscribed in a square of area?	A. π/4 B. π/2 C. π D. π√2
9	What is the area of a circle whose circumference is $\boldsymbol{\pi}$ ?	A. π/4 B. π/2 C. π D. 2π
10	What is the circumference of a circle whose area is $100\pi$ ?	A. 10 B. 20 C. 10π D. 20π
11	Question Image	A. 100 B. 110 C. 120 D. 130
12	If the measures of the angles of a triangle are in the ratio of 1:2:3, and if the length of the smallest side of the triangle is 10, what is the length of the longest side?	A. 10√2 B. 10√3 C. 15 D. 20
13	Question Image	A. 5√2 B. 10 C. 11 D. 13
	Two sides of a right triangle are 12 and 13, which of the following could be the	
14	length of the third side ? i. 5 ii. 11 iii. √313	A. 1 only B. 2 only C. 1 and 2 D. 1 and 3
	If the difference between the measures of the two smaller angles of a right	A. 37 B. 41

15	triangle is 8 <sup>o</sup> , what is the measure, in degrees, of the smallest angle ?	C. 42 D. 49
16	Question Image	A. 20 B. 30 C. 40 D. 50
17	Given the following data, which can form two triangles ? i. $\angle$ C = 30o, c = 8, b = 12 ii. $\angle$ B = 45o, a = $12\sqrt{2}$ , b = $15\sqrt{2}$ iii. $\angle$ C = $60^{\circ}$ , b = 12, c = $5\sqrt{3}$	A. only 1 B. only 2 C. only 3 D. only 1 and 2
18	The area of $\Delta$ ABC, = $24\sqrt{3}$ , side a = 6, and side b = 16. The value of $\angle$ C is	A. 30 <sup>o</sup> B. 30 <sup>o</sup> or 150 <sup>o</sup> C. 60 <sup>o</sup> D. 60 <sup>o</sup> or 120 <sup>o</sup>
19	Question Image	A. 7 B. 17 C. 9 D. 14
20	Question Image	A. a > $4\sqrt{3}$ B. a > 8 C. a = $4\sqrt{3}$ D. $4\sqrt{3}$ < a < 8