CSS General Abilities Topic 3 Geometry

Sr	Questions	Answers Choice
1	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. $C^2/4\pi$ B. $C^2/4\pi^2$ C. $2C$ D. $2C^2\sqrt{\pi}$
2	The area of $\triangle$ ABC, $= 24\sqrt{3}$, side a = 6, and side b = 16. The value of $\angle$ C is	A. 30° B. 30° or 150° C. 60° D. 60° or 120°
3	Question Image	A. 35° B. 45° C. 55° D. 65°
4	The lengths of the sides of triangle are 3, 5, and x. How many possible values of x are there, if x must be an integer ?	A. 1 B. 5 C. 7 D. 8
5	In $\triangle$ABC, the measure of the exterior angles at vertices A and B are 145° and 125°, respectively. Which of the following statement about $\triangle$ABC above must be true. i. The triangle is a right triangle. ii. The triangle is an isosceles triangle. iii. The triangle is a scalene triangle.	A. None B. I only C. III only D. I and III only
6	Question Image	A. 3 B. $2 + 3\sqrt{2}$ C. $3 + 2\sqrt{2}$ D. 5 E. 8
7	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
8	Question Image	A. 48 B. $48 + 12 \ \sqrt{2}$ C. $48 + 12\sqrt{3}$ D. 60
9	The sides of a triangle are in a ratio of 4 : 5 : 6. The smallest angle is	A. 82° B. 69° C. 56° D. 41°
10	Question Image	A. $\angle$ A + 180° B. 180°-^{o} $\angle$ A C. $1/2 \ \angle$BAC D. $\angle$A + 90°
11	Question Image	A. 8 B. 20 C. 8π D. 20π
12	Question Image	A. 180° B. 90° C. 360° D. 270°
13	Question Image	A. 8 B. 20 C. 8π D. 40π
14	Question Image	A. $8 + \ \sqrt{41}$ B. $8 + \ \sqrt{58}$ C. 16

		D. 17
15	Question Image	A. 40° B. 50° C. 80° D. 100°
16	Question Image	A. 45°, 55°, 80° B. 45°, 60°, 75° C. 45°, 65°, 70° D. None of these
17	Question Image	A. 50° B. 90° C. 100° D. 120°
18	If the difference between the measures of the two smaller angles of a right triangle is 8° , what is the measure, in degrees, of the smallest angle ?	A. 37 B. 41 C. 42 D. 49
19	Question Image	A. 4 cm, 7 cm and 3 cm B. 7 cm, 5 cm and 2 cm C. 5 cm, 4 cm and 3 cm D. 4 cm, 5 cm and 2 cm
20	Given the following data, which can form two triangles ? i. $\angle C = 30o$, c = 8, b = 12 ii. $\angle B = 45o$, a = 12√2, b = 15√2 iii. $\angle C = 60^o$, b = 12, c = 5√3	A. only 1 B. only 2 C. only 3 D. only 1 and 2