

ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. hexagon
2	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the first, the angle of depression of the foot of the tower, is 60° . The height of the tower is	A. $h/3$ B. $h/3d$ C. $3h$ D. $3h/d$
3	If $\theta = 60^\circ$ then	A. $\sin \theta = \frac{1}{2}$ B. $\tan \theta = \cot 30^\circ$ C. $\sec \theta = \frac{1}{4}$ D. $\sec \theta = 4$
4	Question Image	
5	The process of finding the unknown elements in triangle is called the	A. solution of the triangle B. Mean difference C. Engineering distance D. angle of depression
6	Question Image	
7	If the elevation of the sun is 30° , then the length of the shadow cast by a tower of 150 ft height is	
8	The angle of elevation of a tower from a point A due south of it is x and from a point B due east of A is y . If $AB = 1$, then the height h of the tower is given by	
9	The law of tangents is _____	
10	If $\triangle ABC$ is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Pythagorean theorem D. Hero's formula
11	Question Image	
12	$x = r \cos \theta, y = r \sin \theta$ are the parametric equation of	A. Circle B. Hyperbola C. Ellipse D. Parabola
13	Question Image	A. The law of sines B. The law of tangents C. The Pythagorean theorem D. None of these

14	If the angle of a triangle are in the ratio 2 : 3 : 7, the triangle is	<p>A. Obtuse B. Acute C. Right angle D. Isosceles</p>
15	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	<p>A. 37m B. 97m C. 101m D. 70m</p>
16	A circle passing through the vertices of any triangle is called	<p>A. Circumcircle B. Incircle C. Escribed circle D. Unit circle</p>
17	Question Image <input type="text"/>	
18	Question Image <input type="text"/>	
19	The towers each 120 meters high are 800 meters apart. The measure of the angle of elevation from the base of one tower to the top of the other is	<p>A. 12° B. 9° C. 7° D. -120°</p>
20	The angle of elevation of the top of a tree from a point 17 meters from its foot is 42° . The height of the tree is	<p>A. 12m B. 21m C. 17m D. 15m</p>