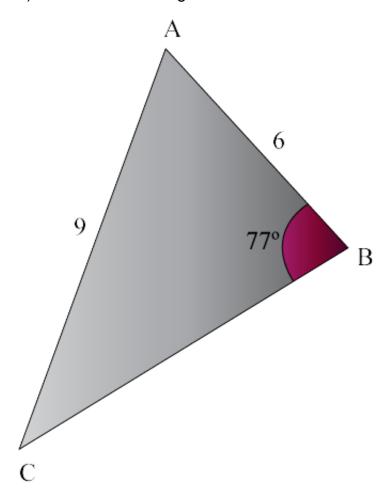
Eleventh Grade - Trigonometry

1) What is the size of Angle C?



- 20.5°
- 80.5°
- 10.5°
- 40.5°

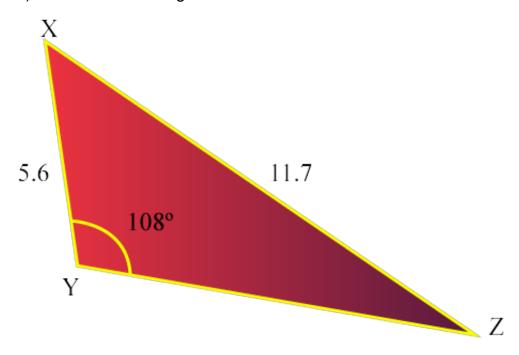
2) If $\tan x + \cot x = 2$, find the value of $\tan^2 x + \cot^2 x$

- 2
- 4
- 8
- 5

3) If $\sin x + \cos x = ?2\sin (90 - x)$ determine $\cot x$

- ?2 2
- ?2
- ?2 + 2
- ?2 + 1

4) What is the size of Angle X?



- 54.9°
- 47.9°
- 64.9°
- 44.9°

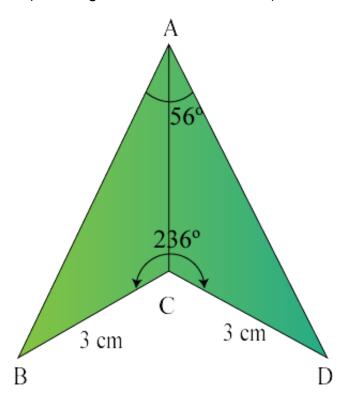
5) If $\sin x = 3/5$, find the values of tanx

- 3/4
- 4/3
- 2/3
- 7/3

- 6) If $\cos x = 1/2$, find the value of $(2 \sec x / 1 + \tan^2 x)$
 - 8
 - 1
 - 4
 - 3
- 7) Evaluate $\tan 35 \times \tan 60 \times \tan 55 \times \tan 30$
 - 7
 - 2
 - 4
 - 1
- 8) If cosec A = sec 25 find A
 - 35
 - 45
 - 65
 - 66
- 9) If $\sin A = \cos 33$, find A
 - 52
 - 57
 - 56
 - 55
- 10) Find the value of ? (0°???90°), when \sin^2 ? 3 \sin ? + 2 = 0
 - 90

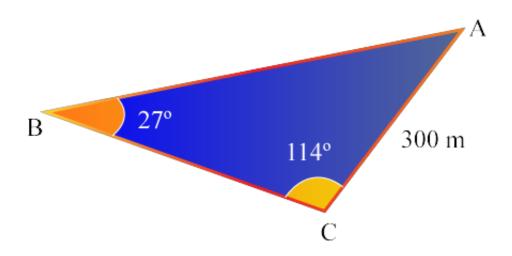
- 0
- 30
- 55

11) The diagram shows an arrowhead (re-entrant kite). Calculate the length of the side AB.



- 6.64 cm
- 5.84 cm
- 5.64 cm
- 9.64 cm

12) Farmer Jones has a triangular field ABC as shown in the following diagram: He wants to fence the field. Fencing is sold by the meter. How many meters of fencing does he need to purchase?



- 1,319.6 m
- 2,319.6 m
- 3,319.6 m
- 4,319.6 m

13) If $3 \tan ? = 4$, evaluate $(3\sin? + 2\cos?) / (3\sin? - 2\cos?)$

- 3
- 5
- 9
- 6

14) Express 1 + 2 sinA cosA as a perfect square.

- (cosA sinA)²
- (sinA cosA)²
- (cosA + sinA)2
- (sinA + cosA)2

15) When A and B be acute angles, $\sin A = 0.3$ and $\cos B = 0.7$ it is

- Possible
- Impossible
- Data inadequate
- · None of these

16)	If 0°	? A	? 90°	can sin.	A = 0.4	4 and	$\cos A =$	0.5 be
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- Possible
- · None of these
- Impossible
- Data inadequate

17)	Express in	radians a	s well as in	grades the fou	rth angle of	a quadrilateral,	which has	three angles
46°	30' 10", 75	° 44' 45", 1	123° 9′ 35″ r	espectively.				

- 2
- 7
- 9
- 5

18) Convert the angle into centesimal system, (13751 / 120)°

- 157g 32` 41``
- 147g 52` 41``
- 117g 12` 41``
- 127g 32` 41``

19) Find the angle in radian through a pendulum swings if its length is 75cm and the tip describes an arc of length 10 cm

- 2/15
- 6/15
- 9/15
- 4/15

20) Find the angle in radian through a pendulum swings if its length is 75cm and the tip	describes an
arc of length 15cm.	

arc of length 15cm.
 2/5 3/5 4/5 1/5
21) Find the angle in radian through a pendulum swings if its length is 75cm and the tip describes an arc of length 21cm
 7/25 8/25 6/25 8/15
22) If G, D, denote respectively, the number of grades, degrees and radians in an angle then G/100 = D/90 =?
45765421
23) If G, D, denote respectively, the number of grades, degrees and radians in an angle then G - D = $?$
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24) Large hand of a clock is 21cm long. How much distance does its extremity move in 20 minutes?

- 88
- 67
- 46
- 96
- 25) Find the angle between the minute hand and hour hand of a click when the time is 7.20?
 - 800?
 - 500?
 - 700?
 - 100?
- 26) If tan = -2, find the values of the trigonometric ratios?
 - 3/2
 - 1/2
 - -1/2
 - -3/2
- 27) Which of the following statement is correct for $\sin = x + 1/x$ is
 - Not possible for real x
 - Not possible for imaginary x
 - Possible for real x
 - Possible for imaginary x
- 28) Whether the equation $2 \sin^2 \cos + 4 = 0$ is
 - Possible
 - Can't determine
 - · Not possible
 - None of these

- 29) Solve for a and c in the given triangle. Also find the area of the ABC.
 - 683
 - 783
 - 183
 - 283
- 30) If A, B, A + B, A B are positive acute angles, find the values of A and B from the equations: $\sin(A B) = 1/2$, $\cos(A + B) = 1/2$
 - (45, 15)
 - (60, 15)
 - (25, 10)
 - (30, 25)