

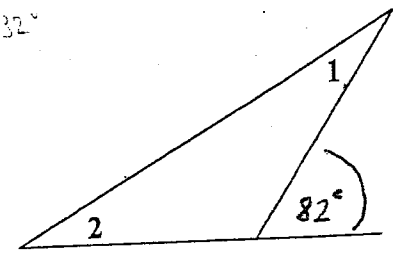
Geometry - Review for 2nd Semester Exam

Ditto #3

Name _____
 Period _____

1) What is the perimeter of an isosceles right triangle with a leg of 4 units?

2) If the measure of an exterior angle of a triangle is 82° , then what is the sum of the measure of angles 1 and 2?



3) Write a pair of equation whose lines are parallel.

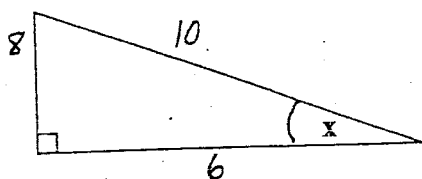
$y =$
$y =$

4) Use the diagram to find

A) $\tan x$ as a fraction in simplest form. =

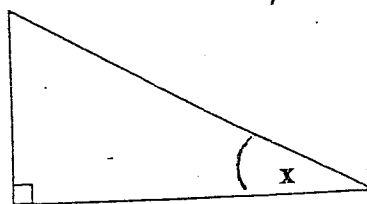
B) $\sin x$ =

C) $\cos x$ =



5

In the figure shown, if $\cos x = 4/5$, what is the $\tan x$?



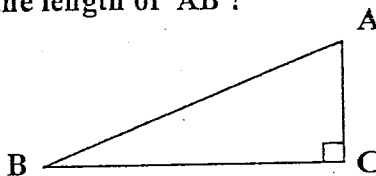
6

For the conditional statement "If two angles are complementary, then the sum of their measures is 90° ", which statement is its converse?

7

In the diagram, $AC = 16$ and $BC = 21$.

What is the length of \overline{AB} ?



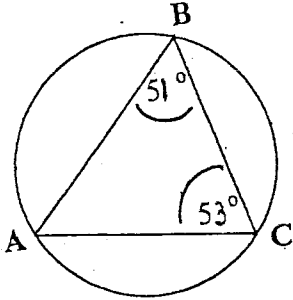
8

What is the perimeter of $\triangle ABC$ with vertex coordinates of $A(0,0)$, $B(40,0)$ and $C(40,30)$?

9) If 28, 41, and 50 are lengths of the sides of a triangle, then the triangle is:

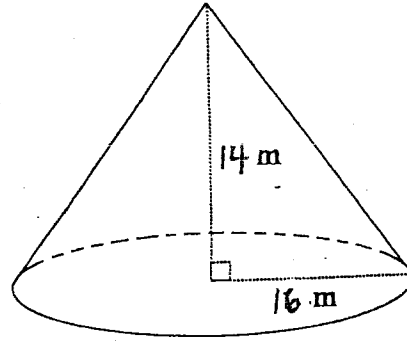
- a) Acute or b) Obtuse

10) $\triangle ABC$ is inscribed in a circle. Find the measure of arc BC.

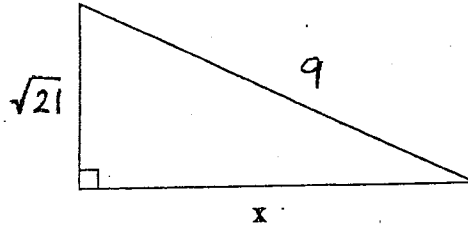


11) To find the height of a pole, a surveyor moves 10 feet away from the base of the pole and measures the angle of elevation to the top of the pole to be 42° . The surveyor's eye is 6' above the ground. What is the height of the pole? Round the answer to the nearest foot.

12) Find the volume of the cone at the right. Round your answer to the nearest tenth. (Use $\pi \approx 3.14$)



13) Use the Pythagorean Theorem to solve for x



14) $m\angle ABC = 4x + 3^\circ$ and $m\angle DBE = 5x - 17^\circ$. What is the measure of $\angle CBE$?

