

I. In Problems 1-6, determine if the triangle with the given side lengths is acute, right, or obtuse. SHOW YOUR WORK.

1.) 8, 9, 10

2.) 7, 11, 5

3.) 12, 20, 16

4.) 2, 3, 4

5.) 10, 15, 11

6.) 40, 45, 50

II. In Problems 7 - 10, solve the circle word problem. SHOW YOUR WORK.

7.) Dom's riding his bike (with wheels of diameter 29") on the bike trial. He rides for 6 miles. How many revolutions do his tires make during his ride?

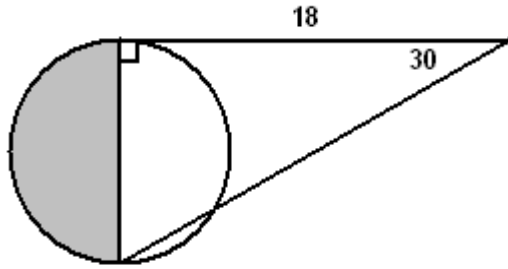
8.) Mr. Hamilton rides his bike to school. His bike has wheels of diameter 22". On the way to school, he rides over a piece of gum that sticks to his tire. How many time does the gun touch the ground if Mr. Hamilton rides 2.5 miles with it attached?

9.) Which is the better buy: A 14" diameter pizza for \$7.99
 or A 18" diameter pizza for \$11.99 ?

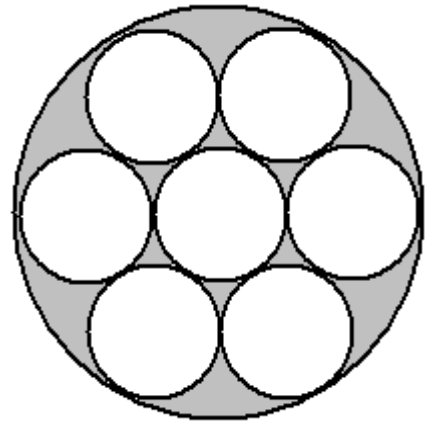
10.) Shea sees a 14" pizza at a shop for \$8.99. To the nearest cent, how much would a 16" pizza cost if it was the same price per area?

III. In Problems 11 - 12, solve for the EXACT shaded area.

11.)

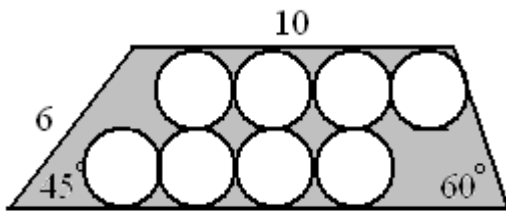


12.)



Area of big circle = 81π
 All small circles are congruent and just intersect each other and the big circle perfectly.

13.) Find the area of the shaded region
 (Decimals are fine.)



All Circles are Congruent and fit inside perfectly.

Bottom Left: 45 degrees

Bottom Right: 60 degrees