Name_____ Date_____

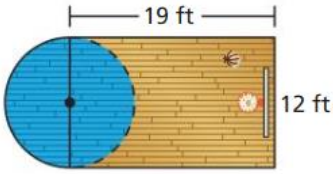
Math 7 Honors Circles w/s #3

Area ($A = \pi r^2$) & Circumference ($C = 2\pi r$)

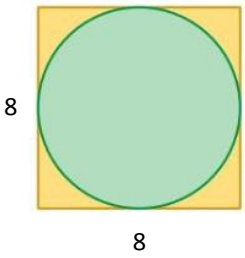
1. Determine the circumference, *to the nearest tenth*, of a circle with a diameter of 20 mm.

2. Jesse is building a circular pool for her horse bulls-eye. The radius of the pool is 21 cm. Determine the area of the pool *in terms of* π.

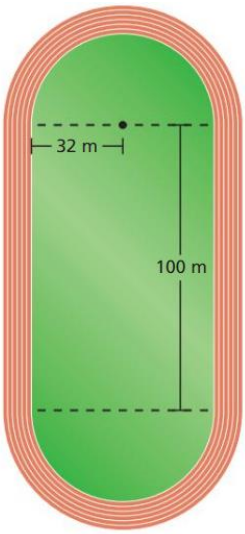
3. Find the area of the portion of the basketball court shown below. Express your answer in terms of π.



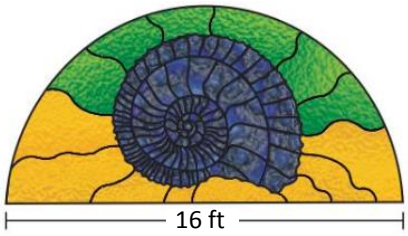
4. Find the area of the square that is ***not*** covered by the circle. Round your answer to the nearest tenth.



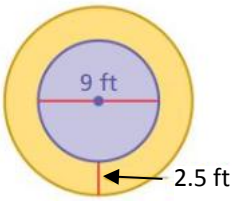
5. Bellport Middle School is planning to install a turf area inside of the track. Based on the dimensions shown, what will be the total amount of turf needed *in terms of* π?



6. Find the perimeter of the glass window shown. Write your answer in terms of π.

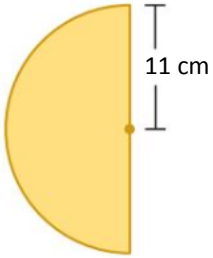


7. Determine the area of the larger circle to the *nearest tenth* of a foot.



8. The circumference of a circular playground can be expressed as $36\pi\ yd$. Determine the radius of the playground.

9. Find the perimeter of the semicircle. Round your answer to the *nearest hundredth*.



10. The Rock Solid Concrete Company has been asked to pave a rectangular area surrounding a circular fountain with a diameter of 8 feet, as shown in the diagram.
Find the area, to the *nearest square foot*, that must be paved.