

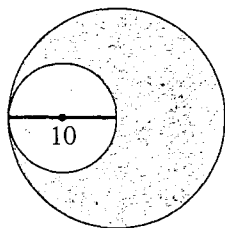
- 1) In the figure above, the circle with center O is inscribed inside square $ABCD$ as shown. If a side of the square measures 8 units, what is the area of the shaded region?

F. $8 - 16\pi$
 G. 8π
 H. 16π
 J. $64 - 16\pi$
 K. 64π

- 2) If the area of circle A is 16π , then what is the circumference of circle B if its radius is $\frac{1}{2}$ that of circle A ?

F. 2π
 G. 4π
 H. 6π
 J. 8π
 K. 16π

- 3) The figure below shows 2 tangent circles such that the 10-centimeter diameter of the smaller circle is equal to the radius of the larger circle. What is the area, in square centimeters, of the shaded region?



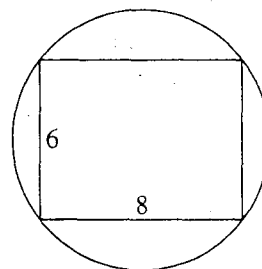
F. 10
 G. 75
 H. 5π
 J. 10π
 K. 75π

- 4) Danielle's living room is a rectangle with the dimensions 16 feet by 18 feet. If she partially covers the bare floor with a circular throw rug with a diameter of 12 feet, what is the approximate area of bare floor, in square feet, that remains exposed?

(Note: Assume the rug lies completely flat and does not touch any wall.)

F. 113
 G. 144
 H. 175
 J. 288
 K. Cannot be determined without knowing the exact position of the rug

- 5) A 6-inch-by-8-inch rectangle is inscribed in a circle as shown below. What is the area of the circle, in square inches?



F. 5π
 G. 16π
 H. 25π
 J. 48π
 K. 96π

- 6) If a square has an area of 64 square units, what is the area of the largest circle that can be inscribed inside the square?

F. 4π
 G. 8π
 H. 16π
 J. 64
 K. 64π