Name: _____ Date: _____

EOC MULTIPLE CHOICE PRACTICE

1) Circle P is dilated to form circle P'. Which statement is ALWAYS true?

a) The radius of circle P is equal to the radius of circle P'.
b) The length of any chord in circle P is greater than the length of any chord in circle P '.
c) The diameter of circle P is greater than the diameter of circle P '.
d) The ratio of the diameter to the circumference is the same for both circles.

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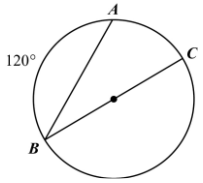
2) In the circle shown below, $\overline{BC}$ is a diameter and $mAB = 120°$.



What is the measure of ∠ABC?

a) 15° b)30° c) 60° d) 120°

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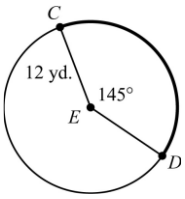
3) Circle E is shown.



What is the length of CD?

a) $\frac{29}{72}\pi\ yd.$ b) $\frac{29}{6}\pi\ yd.$ c) $\frac{29}{3}\pi\ yd.$ d) $\frac{29}{2}\pi\ yd.$

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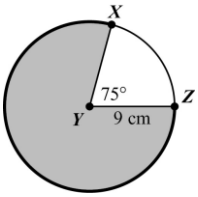
4) Circle Y is shown.



What is the area of the shaded part of the circle?

a) $\frac{57}{4}\pi\ cm.^2$ b) $\frac{135}{8}\pi\ cm.^2$ c) $\frac{405}{8}\pi\ cm.^2$ d) $\frac{513}{8}\pi\ cm.^2$

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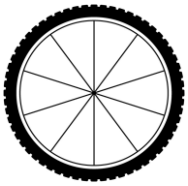
5) The spokes of a bicycle wheel form 10 congruent central angles. The diameter of the circle formed by the outer edge of the wheel is 18 inches.



What is the length, to the nearest 0.1 inch, of the outer edge of the wheel between two consecutive spokes?

a) 18. in. b) 5.7 in. c) 11.3 in. d) 25.4 in.

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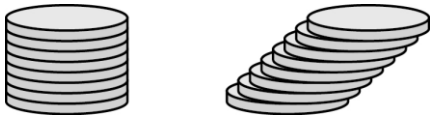
6) Jason constructed two cylinders using solid metal washers. The cylinders have the same height, but one of the cylinders is slanted as shown.

Which statement is true about Jason's cylinders?



a) The cylinders have different volumes because they have different radii.
b) The cylinders have different volumes because they have different surface areas.
c) The cylinders have the same volume because each of the washers has the same height.
d) The cylinders have the same volume because they have the same cross-sectional area at every plane parallel to the bases and the same height.

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7) What is the volume of a cylinder with a radius 3 in. and a height of 9/2 in.?

a) $\frac{81}{2}\pi\ in.^3$ b) $\frac{27}{4}\pi\ in.^3$ c) $\frac{27}{8}\pi\ in.^3$ d) $\frac{9}{4}\pi\ in.^3$

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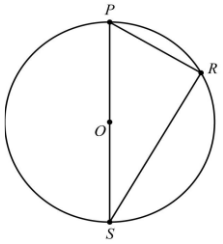
8) In circle O, $\overline{PS}$ is a diameter. The measure of PR is 72°.

What is the measure of ∠SPR?

a) 36°
b) 54°
c) 72°
d) 108°



not drawn to scale

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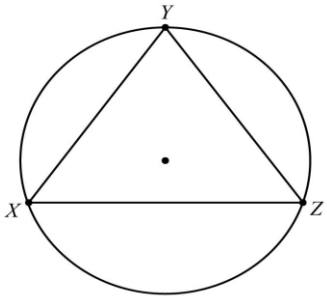
9) Isosceles ΔXYZ is inscribed in this circle.

$\overline{XY} \cong \overline{ZY}$ & $mYZ = 108^\circ$

What is the measure of ∠XYZ?

a) 48°
b) 54°
c) 72°
d) 108°



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10) In this diagram, $\overline{QT}$ is tangent to circle P at point T.

The measure of minor arc ST is 70°. What is m∠TQP?

a) 20°
b) 25°
c) 35°
d) 40°