

Name: Key

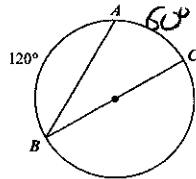
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MULTIPLE CHOICE PRACTICE

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. $C = \pi d$ $\pi = \frac{C}{d}$

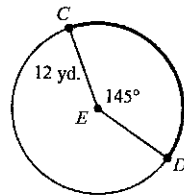
2) In the circle shown below, \overline{BC} is a diameter and $m\widehat{AB} = 120^\circ$.



What is the measure of $\angle ABC$?

- a) 15°
- b) 30°
- c) 60°
- d) 120°

3) Circle E is shown.

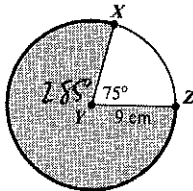


$\frac{145}{360} \cdot 2\pi(12)$

What is the length of \widehat{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.

4) Circle Y is shown.



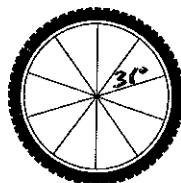
$\frac{285}{360} \pi(9)^2$

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

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.

$d=18$ $r=9$



$\frac{36}{360} \cdot 2\pi(9)$

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.

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.

7) What is the volume of a cylinder with a radius 3 in. and a height of $\frac{9}{2}$ in.?

a) $\frac{81}{2} \pi \text{ in.}^3$

b) $\frac{27}{4} \pi \text{ in.}^3$

c) $\frac{27}{8} \pi \text{ in.}^3$

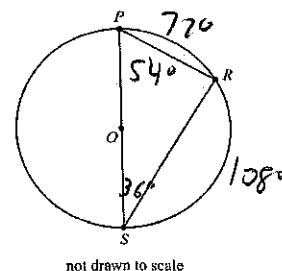
d) $\frac{9}{4} \pi \text{ in.}^3$

$\pi(3)^2 \cdot 4.5$

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

What is the measure of $\angle SPR$?

- a) 36°
- b) 54°
- c) 72°
- d) 108°

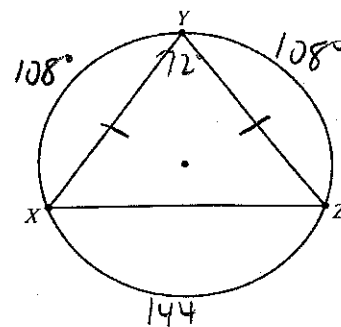


9) Isosceles triangle XYZ is inscribed in this circle.

$\overline{XY} \cong \overline{ZY}$ & $m\widehat{YZ} = 108^\circ$

What is the measure of $\angle XYZ$?

- a) 48°
- b) 54°
- c) 72°
- d) 108°



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

The measure of minor arc \widehat{ST} is 70° . What is $m\angle$ ~~QST~~ ^{TAP}?

- a) 20°
- b) 25°
- c) 35°
- d) 40°

