## Geometry

 Circles|  |
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## A. MULTIPLE CHOICE. Write the letter for the best answer in the space provided below.

1. The distance around the outside of a circle (its perimeter) is called:
a. circumference
c. diameter
b. radius
d. radical
e. none of the above
2. A line segment with the center of a circle and a point on the circle as endpoints is called:
a. circumference
c. diameter
b. radius
d. radical
e. none of the above
3. A line segment which passes through the exact center of a circle and whose end points lie on the circle is called:
a. circumference
c. diameter
b. radius
d. radical
e. none of the above
4. The diameter of a circle is exactly $\qquad$ the length of its radius :
a. half
c. the same as
b. twice
d. radical
e. none of the above
5. 

a. $\mathrm{C}=2 \pi \mathrm{r}$
b. $\mathrm{C}=4 \pi \mathrm{r}^{2}$
c. $\mathrm{C}=\mathrm{a}+\mathrm{b}+\mathrm{c}$
d. $a^{2}+b^{2}=c^{2}$
e. none of the above
5. The formula to calculate the area of a circle is:
a. $\mathrm{A}=2 \pi \mathrm{r}^{2}$
b. $A=\pi r^{2}$
c. $A=a+b+c$
d. $\mathrm{a}^{2}+\mathrm{b}^{2}=\mathrm{c}^{2}$
e. none of the above

B. Calculations.

6-10. Calculate the circumference of each circle. Reduce fractions to their lowest terms.
6. $\mathrm{r}=2$ inches
7. $\mathrm{r}=3^{1 / 2}$ inches
8. $r=4^{1 / 4}$ inches
9. $\mathrm{d}=2$ inches
10. $d=3$ inches

11-15. Calculate the area of each circle. Reduce fractions to their lowest terms.
11. $r=2$ inches
12. $\mathrm{r}=3^{1 / 2}$ inches
13. $d=4^{1 / 1} 4$ inches
14. $\mathrm{d}=2$ inches
15. $\mathrm{c}=3$ inches

