## Geometry: Ch 9 Group Review

1) Find the area of a square that has a perimeter of 36 in.
2) Find the area of a circle with center $J$ that has a circumference of $14 \pi$ yd. (leave answer in terms of $\pi$ )
3) Find the area of a regular pentagon with a side length of 10 ft . (draw a diagram, calculator allowed)
4) Find the area of a rhombus that has $\mathrm{d}_{1}=21 \mathrm{yd}$ and $\mathrm{d}_{2}=24 \mathrm{yd}$.
5) Find the area of a kite that has $d_{1}=32 m$ and $d_{2}=$ 18 m .
6) Find the area of a regular octagon with an apothem length of 8 cm . (draw a diagram, calculator allowed)
7) Describe the effect of each change on the perimeter and area of the given figure:

The base and height of a triangle with base of 8 ft and height of 20 ft are both multiplied by 4 .
9) Find the probability that...

a) A point chosen at random is not on $\overline{C D}$
b) A point chosen at random is on $\overline{B C}$ or $\overline{C D}$.
10) Find the area of the shape:

12) Draw and classify the polygon with the given vertices. Find the perimeter and area of the polygon.
$\mathrm{M}(-2,5), \mathrm{N}(3,-2), \mathrm{P}(-2,-2)$

11) Find the area of the shaded region:

13) Find the area of the polygon with the given vertices:
$\mathrm{V}(-2,2), \mathrm{W}(4,0), \mathrm{X}(2,-3), \mathrm{Y}(-3,0)$

14) Find the probability that a point chosen at random inside the $40 \mathrm{~m} \times 24 \mathrm{~m}$ rectangle is inside the rectangle but not inside the hexagon, triangle, or circle.


