

## Honors Geometry Chapter 11 Review

Know how to do problems like:

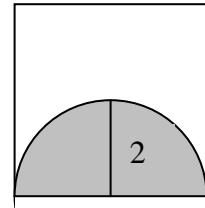
- p.470 1-19
  - p.471 1-18
- } This is an excellent review to for the test!
- know how to do a problem involving Heron's formula
  - Know how to find the sum of the interior and exterior angles of a polygon.

Problems:

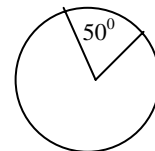
1. Find the area of an equilateral triangle with side 30 cm long.
2. Find the area of a regular hexagon with a side 22 in.
3. Find the area of a regular octagon with a radius of 5 yd and a side 3.8 yd.
4. Find the area of a circle with a circumference of 24 in.

5. Find the probability that a point chosen at random in the figure lies in the shaded region.

The figure is a square with sides 4 in.



6. Find the area of a parallelogram with a base of 4 cm and a height of 10 cm.
7. A rectangle has a length of 14 in. and an area of  $168 \text{ in}^2$ . Find the width.
8. A trapezoid has bases of 7 m and 15 m. The area of the trapezoid is  $66 \text{ m}^2$ . Find the height of the trapezoid.
9. The legs of a right triangle have lengths of 14 ft and 12 ft. Find the area.
10. The diagonals of a rhombus are 12mm and 18 mm long. Find the area.
11. Find the probability of a dart hitting the  $50^\circ$  region.



Answers:

1.  $225\sqrt{3} = 389.71$
2.  $726\sqrt{3} = 1257.5$
3. 70.3
4. 45.83
5. 60.7%
6.  $40 \text{ cm}^2$
7. 12 in
8. 6
9. 84 ft
10. 108
11.  $50/360 = 13.9\%$