

Use the following formulas to help you on this review:

Sum of the interior angles of a polygon: $(n - 2) \cdot 180^\circ$ Sum of the exterior angles: 360°

Area of a Rectangle: $A = b \cdot h$

Area of a Square: $A = s^2$

Area of a Triangle: $A = \frac{b \cdot h}{2}$

Area of a parallelogram: $A = b \cdot h$

Area of a rhombus: $A = \frac{d_1 \cdot d_2}{2}$

Area of a Trapezoid: $A = \frac{(b_1 + b_2)h}{2}$

Circumference of a circle: $C = 2\pi r$ or $C = \pi d$

Arc length: $\frac{x}{2\pi r} = \frac{\text{measure of central angle}}{360}$

Area of a circle: $A = \pi r^2$

Area of a sector: $\frac{x}{\pi r^2} = \frac{\text{measure of central angle}}{360}$

Area of a regular polygon: $A = \frac{n \cdot s \cdot a}{2}$

Perimeter: $P = n \cdot s$

Decide whether the polygon is convex or concave.

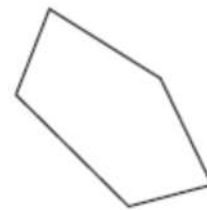
1.



2.

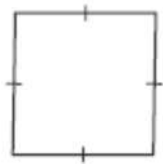


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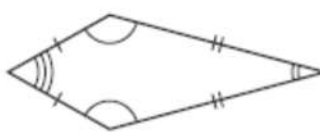


Decide whether the polygon is an equilateral, equiangular, or neither.

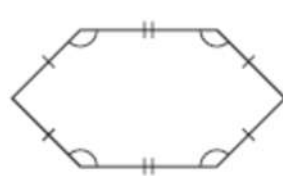
4.



5.

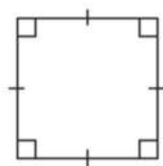


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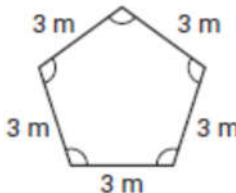


Tell if the polygon is regular.

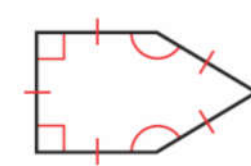
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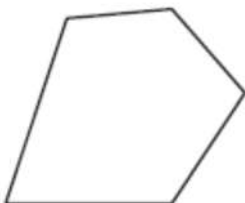


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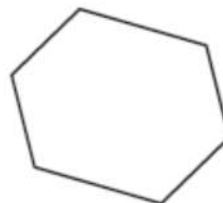


Find the sum of the measures of the interior angles of each polygon.

10.



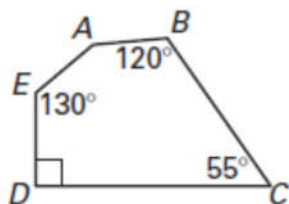
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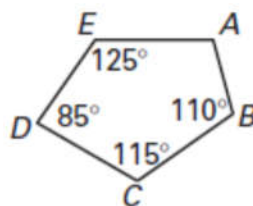
12. Find the measure of **each** interior angle of a regular octagon.

Find the $m \angle A$.

13.

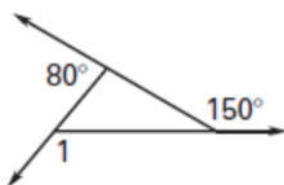


14.

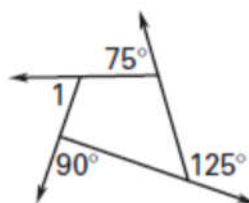


Find the $m \angle 1$.

15.



16.



Find the area of each SQUARE.

17.



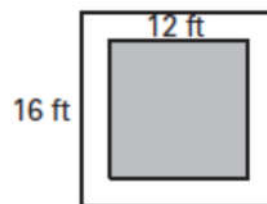
18.



19. If the area of a square is 64 in^2 , find the length of each side.

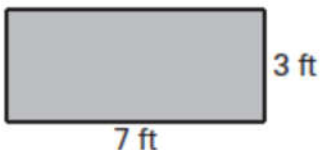
20. The diagram shows a square rug covering part of the floor of a square dining room. Find:

- a) The area of the rug
- b) the area of the dining room
- c) the area of the dining room floor not covered by the rug

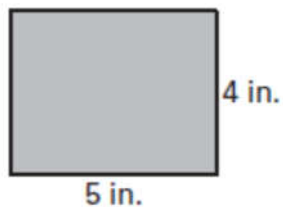


Find the area of each RECTANGLE.

21.

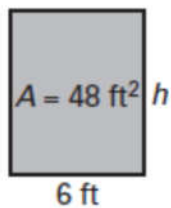


22.

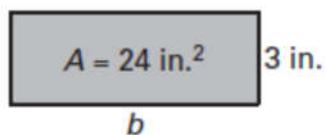


A gives the area of the rectangle. Find the missing side length.

23.

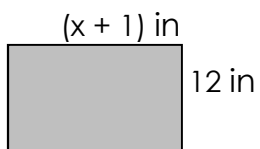


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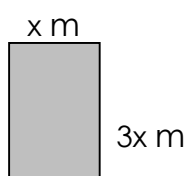


Solve for x using the given area.

25. Given Area = 48 in^2

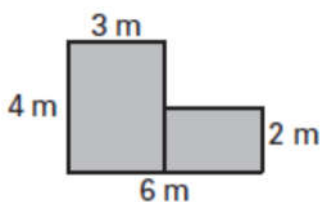


26. Given Area = 48 m^2

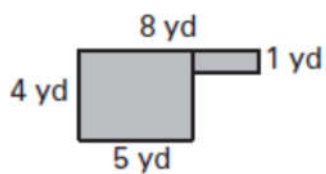


Find the area of the polygon made up of rectangles.

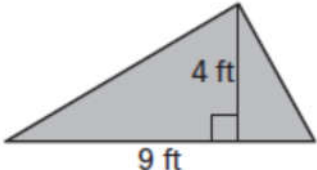
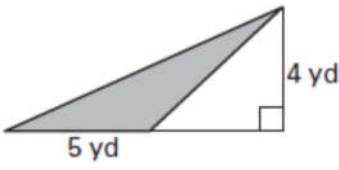
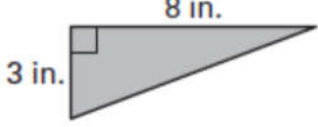
27.



28.



Find the area of the shaded TRIANGLE.

29. 
30. 
31. 

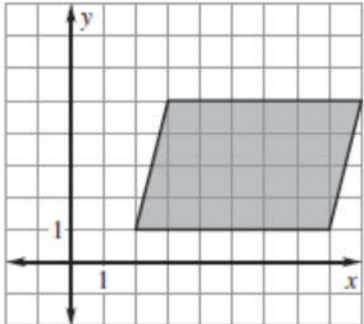
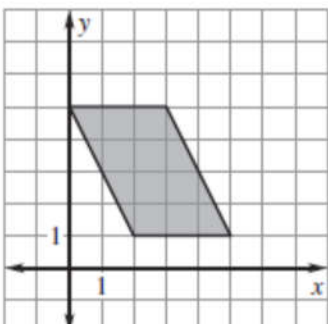
A gives the area of the triangle. Find the height, h.

32. $A = 27 \text{ yd}^2$ 
33. $A = 18 \text{ m}^2$ 

34. The scale factor of $\triangle PQR$ to $\triangle XYZ$ is $\frac{2}{5}$. Find the ratio of their areas.

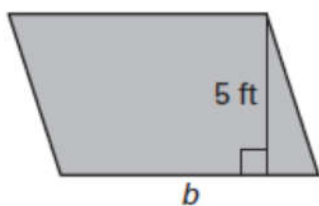
35. The area of a triangle is 6 m^2 . The base of the triangle is 1 more than the height. Find the base and the height. (Write out the equation, no guess and check!)

Find the area of the PARALLELOGRAM.

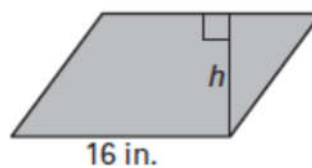
36. 
37. 

A gives the area of the parallelogram. Find the missing measure.

38. $A = 40 \text{ ft}^2$

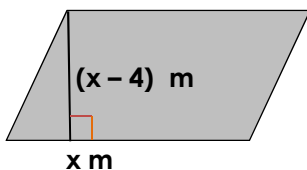


39. $A = 144 \text{ in.}^2$

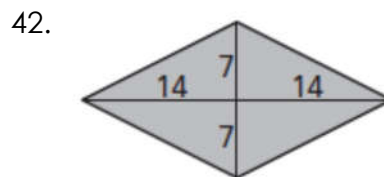
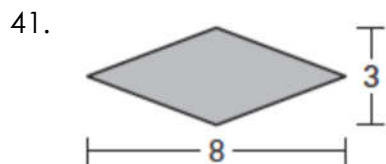


Solve for x using the given area.

40. $A = 60 \text{ m}^2$



Find the area of the RHOMBUS.

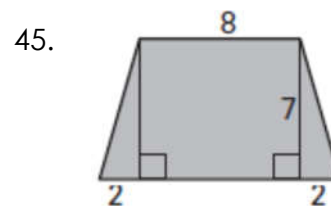
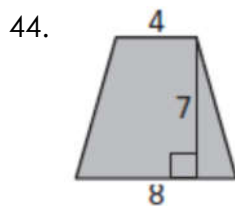
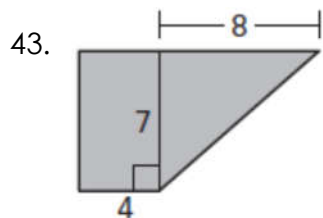


Match the trapezoid with the equation used to find its area.

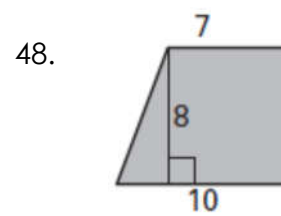
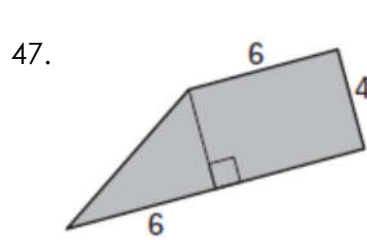
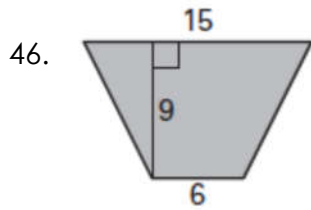
A. $A = \frac{(7)(4+8)}{2}$

B. $A = \frac{(7)(8+12)}{2}$

C. $A = \frac{(7)(4+12)}{2}$



Find the area of the **TRAPEZOID**.



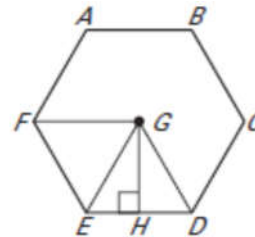
49. A trapezoid has an area of 60 square units. The lengths of the bases are 6 units and 9 units. Find the height.

Use the diagram below to answer the following questions.

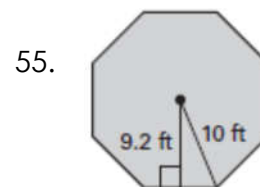
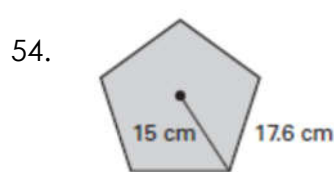
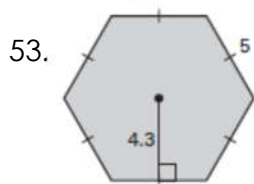
50. Which segment is the apothem of this polygon?

51. Name a segment that is a radius of this polygon.

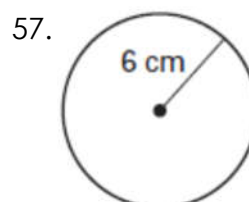
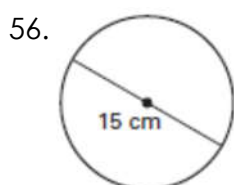
52. Name a central angle of this polygon.



Find the perimeter and area of the regular polygon.



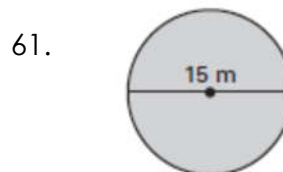
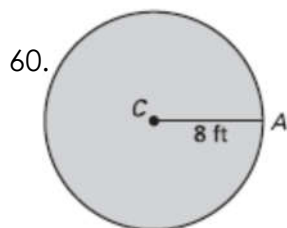
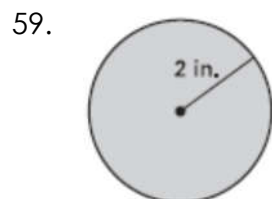
Find the exact and approximate CIRCUMFERENCE of the circle.



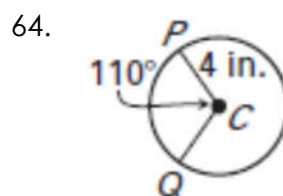
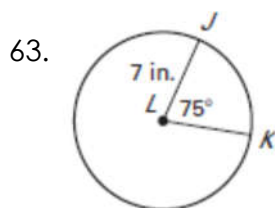
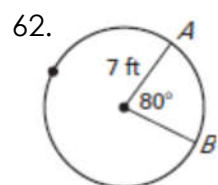
Find the radius of the circle given the circumference.



Find the exact and approximate AREA of the circle.



Find the arc length.



Find the area of the sector.

