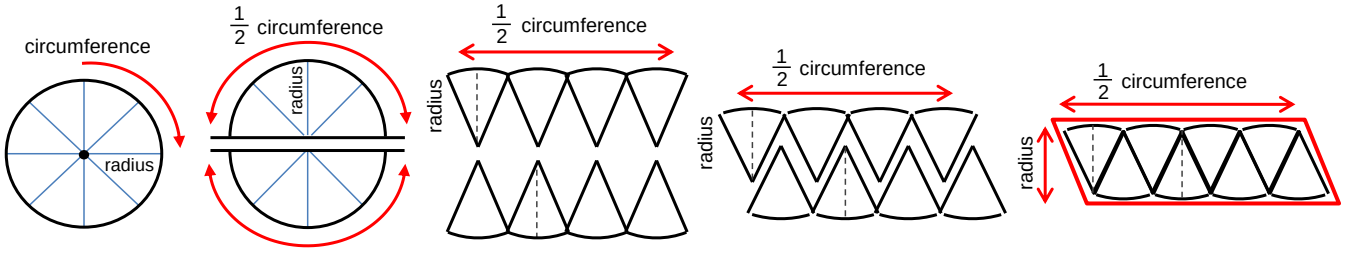
CIRCLES - AREA

ANSWERS

Area of a circle = π x radius x radius

TO FIND THE AREA FORMULA OF A CIRCLE, SEPARATE IT AND THEN PUT IT BACK TOGETHER TO FORM A PARALLELOGRAM. THIS WILL GIVE YOU A BASE ($\frac{1}{2}$ circumference) AND HEIGHT (radius), WHICH YOU CAN MULTIPLY TO FIND THE AREA.



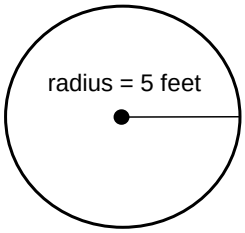
Now your turn. Use the information above and the vocabulary below to fill in the blanks.

Circumference π (Pi) 3.14 Area of a parallelogram Area of a circle

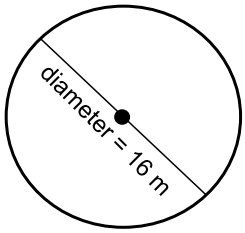
1. **Area of a parallelogram** = base x height
2. **π (Pi)** = 3.141592653589…, which is approximately 3.14
3. **Area of a circle** = $\frac{1}{2}$ x circumference x radius
4. **Circumference** = 2 x π x radius, which is the same as 2 π r
5. **Area of a circle** = $\frac{1}{2}$ x 2 x π x radius x radius
6. **Area of a circle** = πr^2

$A = \pi r^2$

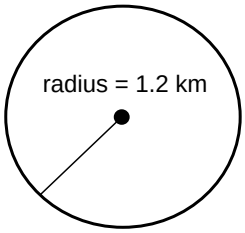
Find the area of each circle. **Use π = 3.14**

1. 

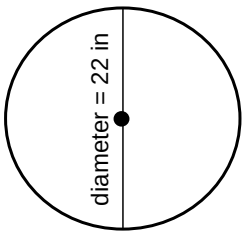
Area = 78.5 square feet

2. 

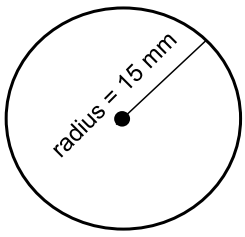
Area = 200.96 square meters

3. 

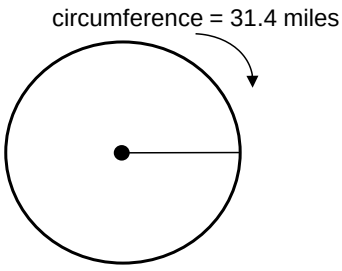
Area = 4.5216 square kilometers

4. 

Area = 379.94 square inches

5. 

Area = 706.5 square millimeters

6. 

Area = 78.5 square miles