

G7 M3 L20 Problem Set Be sure you check out the extra help video if you need it.

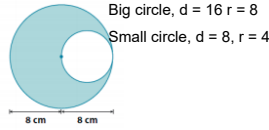
Problem Set

Don't forget your heading :)

Name:
Date:
G7 M3 L20

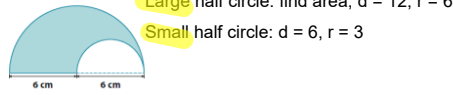
Problem Set

1. Find the area of the shaded region. Use 3.14 for π .



Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

2. The figure shows two semicircles. Find the area of the shaded region. Use 3.14 for π .



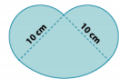
Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

3. The figure shows a semicircle and a square. Find the area of the shaded region. Use 3.14 for π .



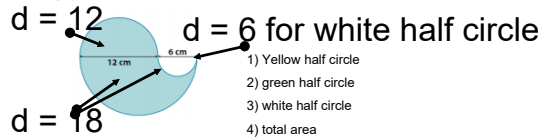
Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

4. The figure shows two semicircles and a quarter of a circle. Find the area of the shaded region. Use 3.14 for π .



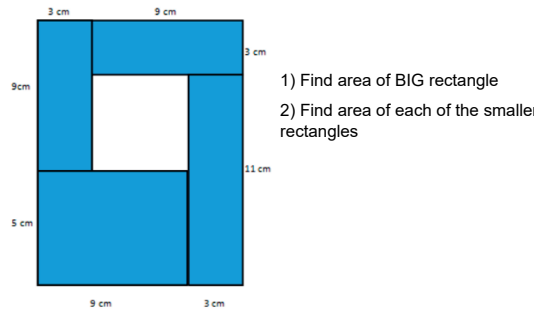
Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

5. Jillian is making a paper flower motif for an art project. The flower she is making has four petals, each formed by three semicircles as shown below. What is the area of the paper flower? Provide your answer in terms of π .



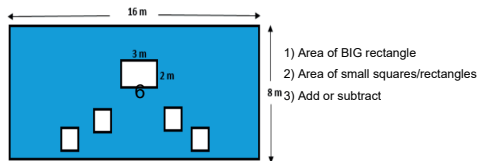
Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

6. The figure is formed by five rectangles. Find the area of the unshaded rectangular region.



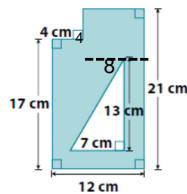
Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

7. The smaller squares in the shaded region each have side lengths of 1.5 m. Find the area of the shaded region.



Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

8. Find the area of the shaded region.



Area for a Circle: $A = \pi r^2$
Area for a semicircle: $A = \frac{\pi r^2}{2}$
Area for a quarter circle: $A = \frac{\pi r^2}{4}$
Area for a square or rectangle: $A = bh$
Area of a triangle: $A = \frac{bh}{2}$

- 9) The unshaded regions are quarter circles. Approximate the area of the shaded region.

