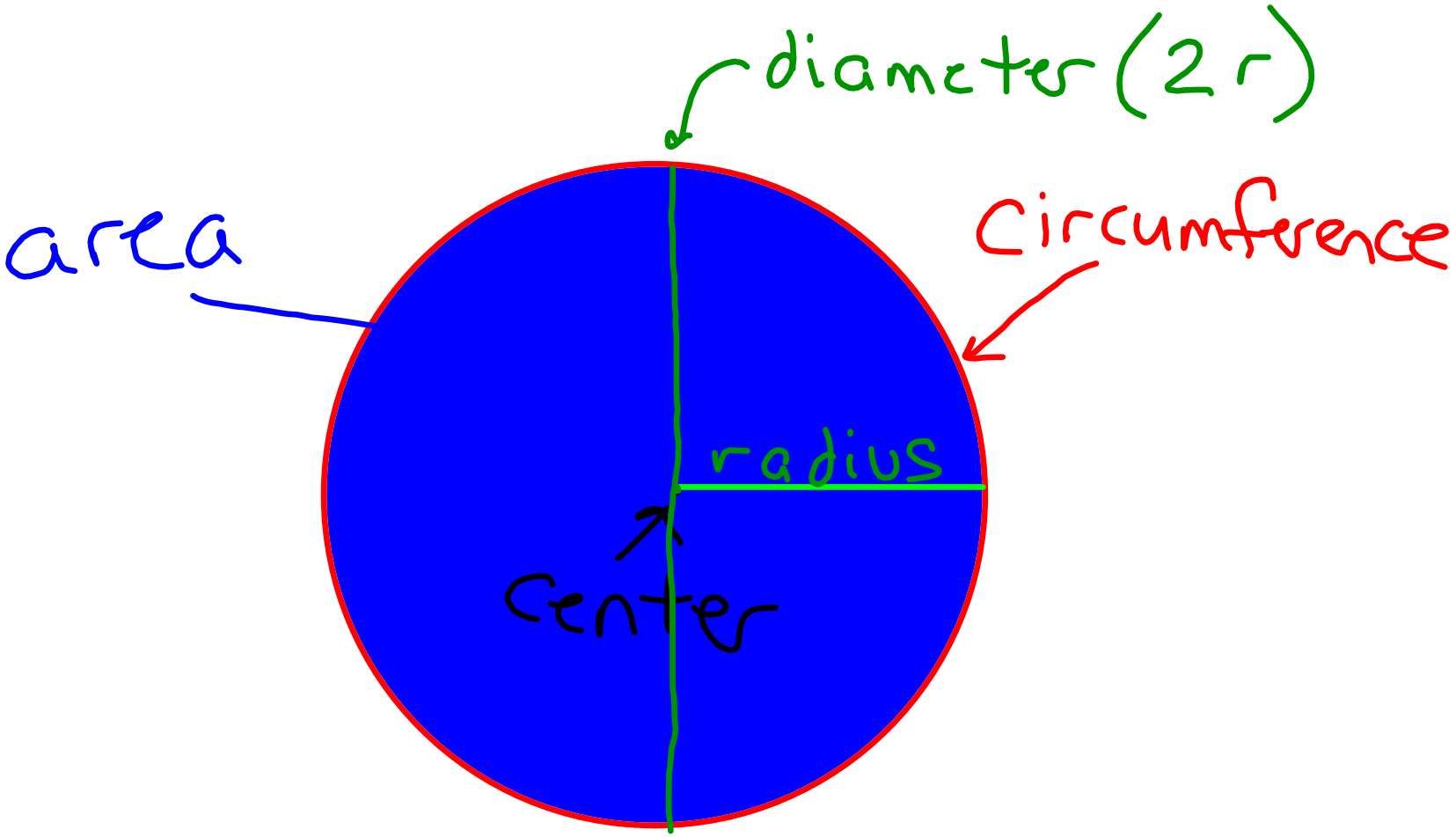
TODAY'S AGENDA: November 16th+

- Work on Khan Academy Mission:
- Complete Mission Foundation Skills
- Today's Objective: Whole-Group Lessons:
- Circles Introduction & Surface Area

- Standards:
- CCSS.MATH.CONTENT.HSG.CO.A.1:
- Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

- Continue With Your Mission Assignments

Circles - A Review of the Parts



Circles - Calculating Area

$A_o = \pi r^2$

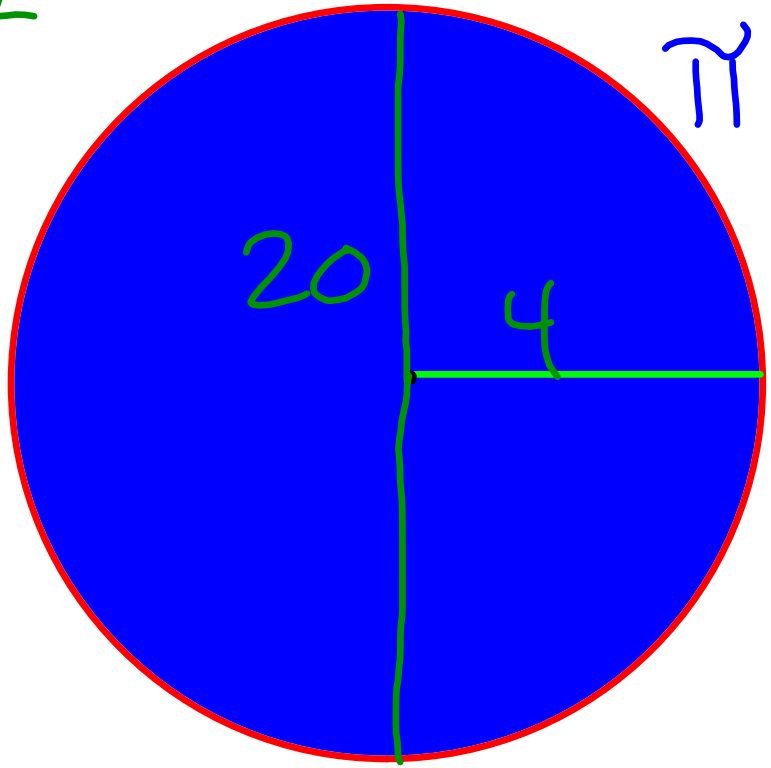
$= \pi 4^2$

16π

16 pi

In terms of π →

π is in your answer.



$d = 20$

$r = 10$

$A = \pi r^2$

$\pi 10^2$

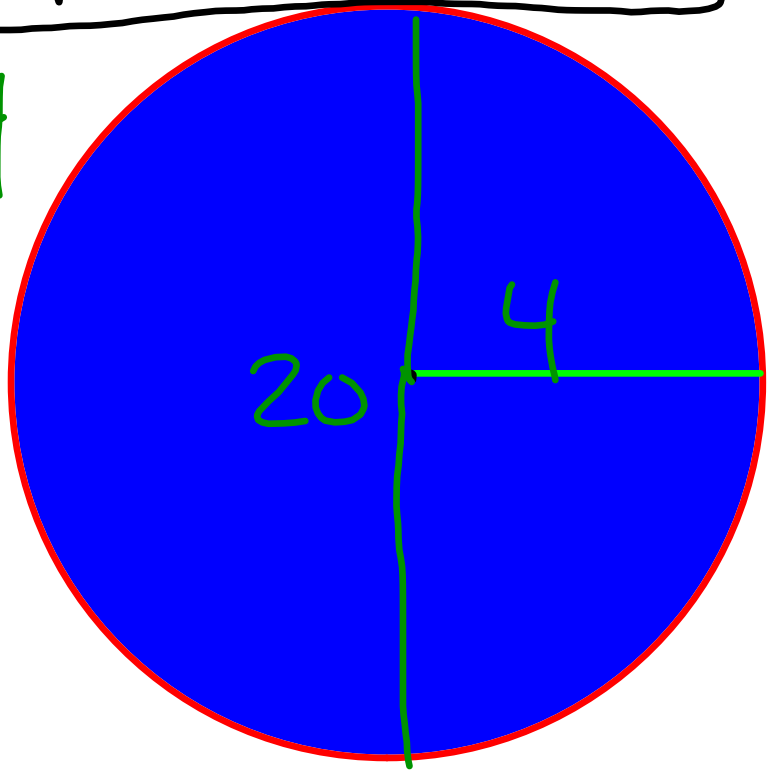
100π

Circles - Calculating Circumference

$C = 2\pi r = C = d\pi$

$2\pi 4$

$C = 8\pi$



$d = 20$

$r = 10$

$C = 2\pi r$

$2\pi 10$

$C = 20\pi$

$A = \pi r^2$

$C = 2\pi r$

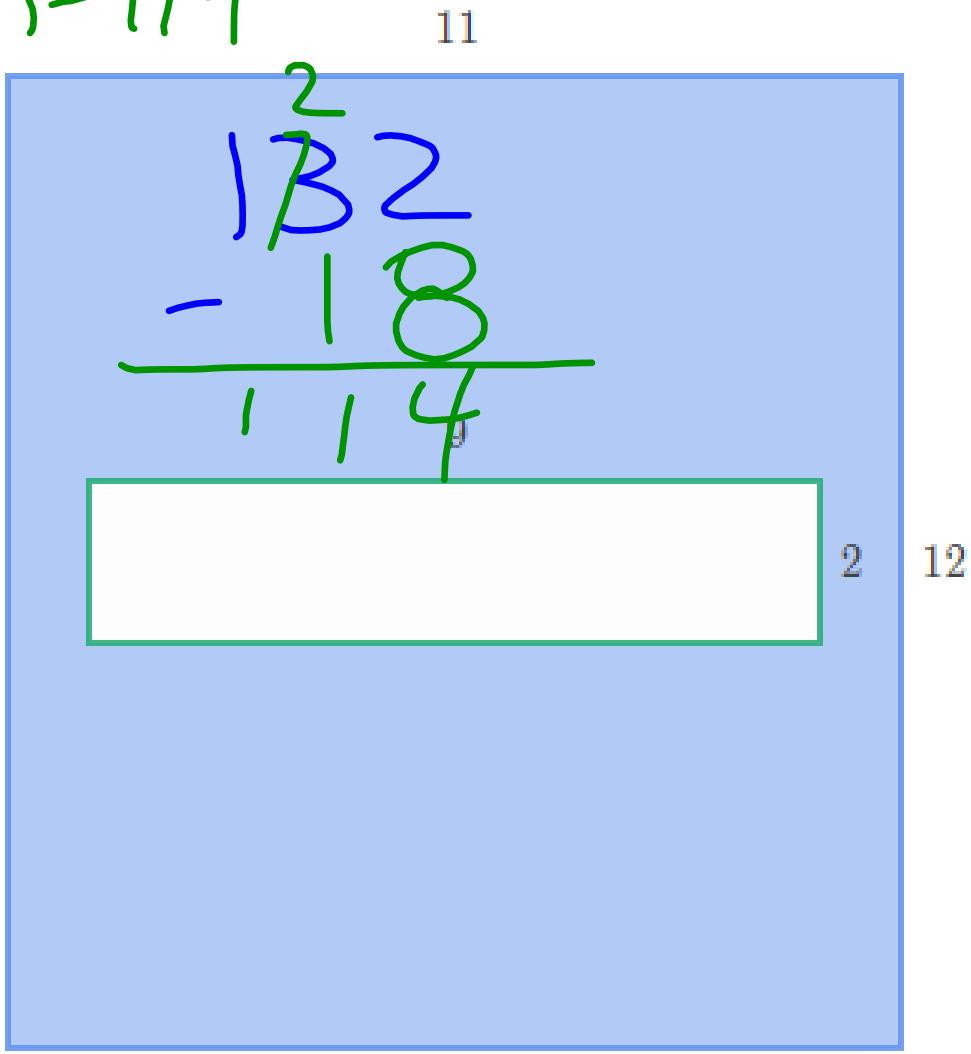
Area of Shaded Region

$$\text{Area}_{\text{BIG}} - \text{Area}_{\text{SMALL}}$$

$$\text{Area}_{\text{shaded}}$$

What is the area of the shaded region?

A = 114



$A_D = l \times w$

11×12

$A_D = 132$

$A_{\square} = l \times w$

9×2

$A_{\square} = 18$

$132 - 18 = 114$

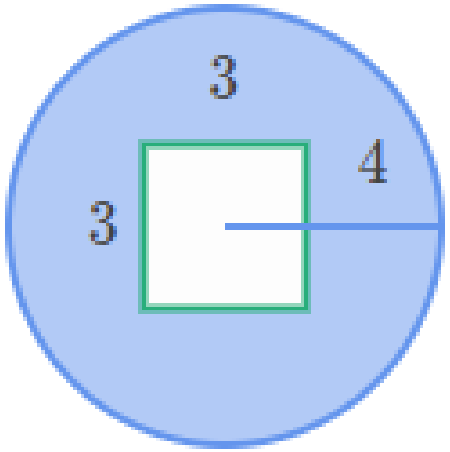
$$\begin{array}{r} {\scriptstyle 1\,1} \\ 12 \\ \hline 132 \end{array}$$

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 22 \\ \hline 242 \end{array}$$

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 66 \\ \hline 626 \\ 726 \end{array}$$

What is the area of the shaded region?

Round your final answer to the nearest hundredth.



$A_{\bigcirc} = \pi r^2$

$= \pi 4^2$

$A_{\bigcirc} = 16\pi$

$A_{\square} = l \times w$

3×3

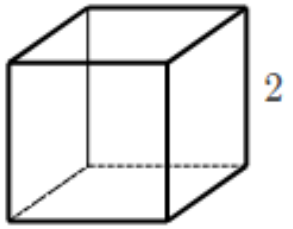
$A_{\square} = 9$

41.27

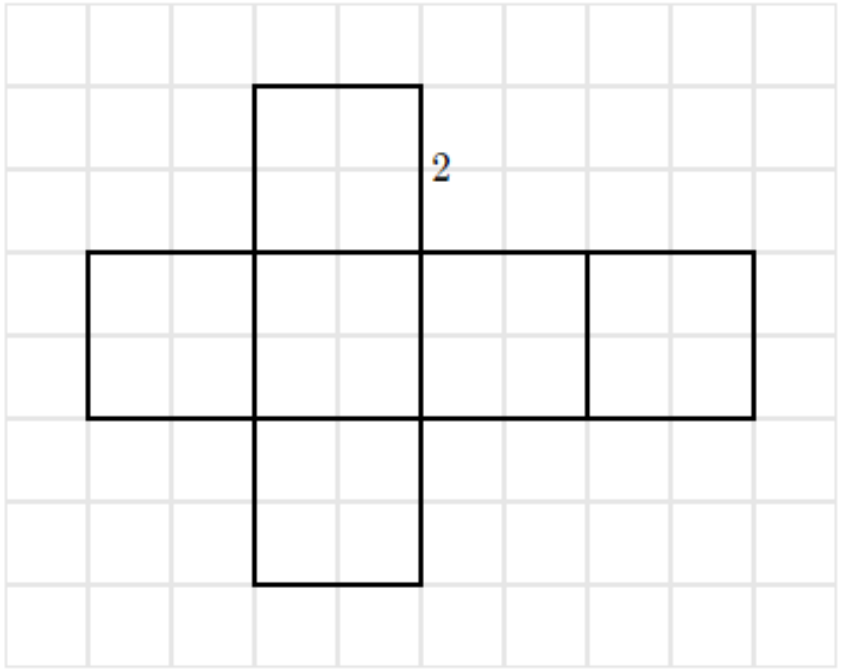
$16\pi - 9$

Surface Area

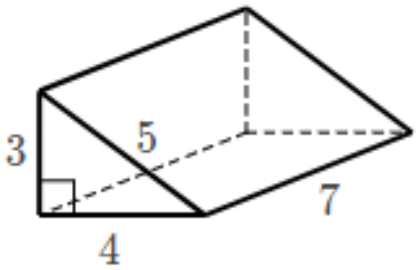
Check out this cube:



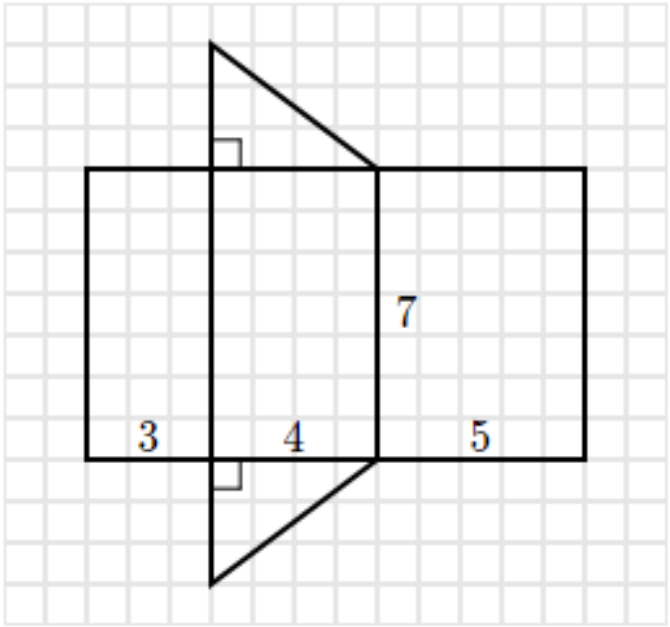
Find the surface area of the cube (above) using its net (below).



Check out this right triangular prism:



Find the surface area of the right triangular prism (above) using its net (below).



Skills You Should Be Working on:

1. Radius and Diameter
2. Area of a Circle
3. Circumference of a Circle
4. Shaded Areas
5. Nets of Polyhedra
6. Surface Area Using Nets
7. Surface Area