



MasterMath

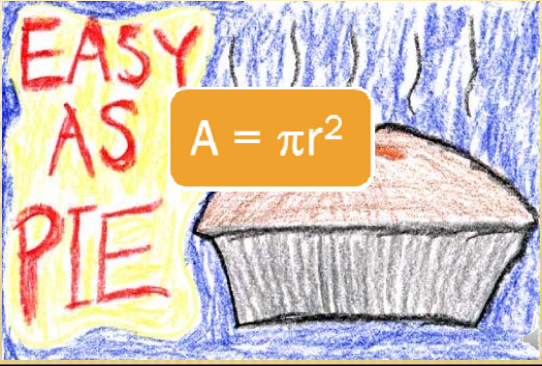


Geometry


π AND THE AREA OF A CIRCLE



π AND THE AREA OF A CIRCLE

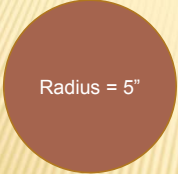


$A = \pi r^2$




π AND THE AREA OF A CIRCLE

$A = \pi r^2$




Radius = 5"



Diameter = 18"

$A = 3.14 * 5^2 = 78.5$ sq. in.

$A = 3.14 * (18 * \frac{1}{2})^2 = 254.34$ sq. in.



π AND THE AREA OF A CIRCLE

What is the area of this semi-circle?

$$A = \pi r^2$$



You Try 

π AND THE AREA OF A CIRCLE

$$A = \pi r^2$$

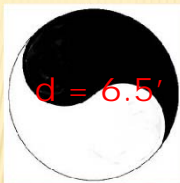


$$A = \frac{1}{2} \pi r^2$$
$$= .5 * 3.14 * 22^2$$
$$= 739.88 \text{ sq. cm.}$$

You Try 

π AND THE AREA OF A CIRCLE

$$A = \pi r^2$$



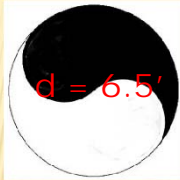
What is the area of the white portion?

You Try 

π AND THE AREA OF A CIRCLE

$$A = \frac{1}{2} * 3.14 * (6.5 * \frac{1}{2})^2$$

$$= 16.6 \text{ sq. ft.}$$



What is the area of the white portion?

You Try

π AND THE AREA OF A CIRCLE

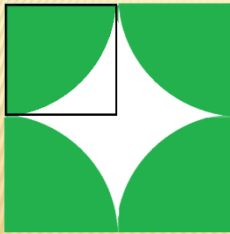
The green square has sides of 12". What is the area of the white region?



You Try

π AND THE AREA OF A CIRCLE

The green square has sides of 12". What is the area of the white region?



Area of Square = $12 * 12 = 144$

Area of Circle = $3.14 * 6^2 = 113$

Area of white region = $144 - 113$
 $= 31 \text{ sq. in.}$

You Try
