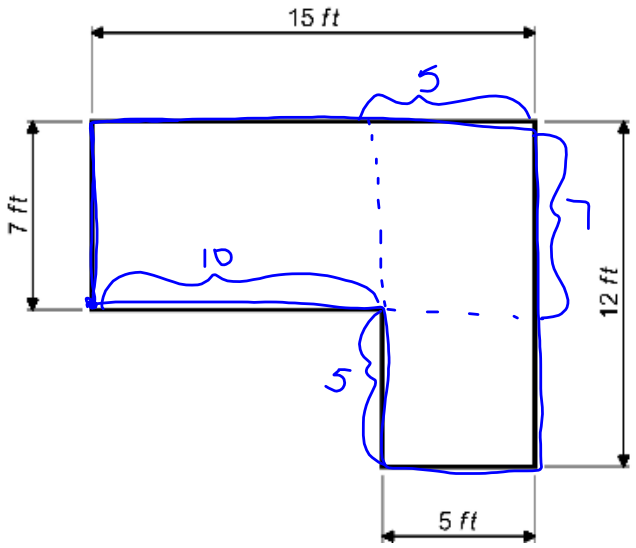
DO NOW

A chicken coop is being made in the shape shown below with the dimensions shown. If fencing must be placed on each side of the pen and it costs $2.50 per foot, how much will it cost to enclose this pen?



$P = 5+10+7+15+12+5$

$P = 54$ ft

$54(2.50)$

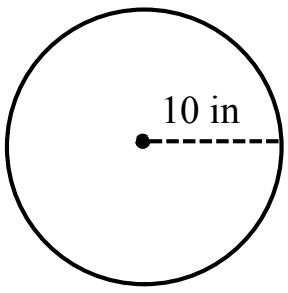
$135

Nov 23-7:07 AM

The perimeter of a circle is called the **circumference**

$$C = 2\pi r \text{ or } C = \pi d$$

Find the circumference of the circle



a) In terms of π

$r = 10$

$d = 20$

$C = \pi d$

$C = 20\pi$

b) To the nearest hundredth

$C = 62.83185\ldots$

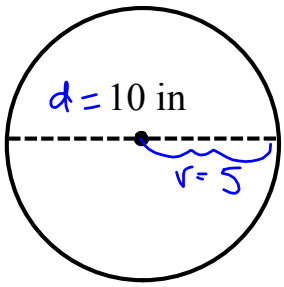
62.83

Nov 23-8:13 AM

Area of a Circle

$$A = \pi r^2$$

Find the area of the circle



a) In terms of π

$A = \pi r^2$

$A = \pi (5)^2$

$A = 25\pi$

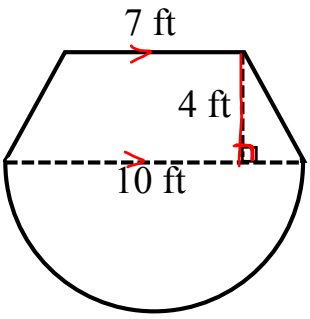
b) To the nearest hundredth

$A = 78.539816$

78.54

Feb 7-9:34 AM

To the nearest tenth of an inch, find the area of the patio below:



$A = \frac{1}{2}(b_1 + b_2) \cdot h$

$A = \frac{1}{2}(7+10) \cdot 4$

$A = 34$

$A = \frac{\pi r^2}{2}$ or $\frac{1}{2}\pi r^2$

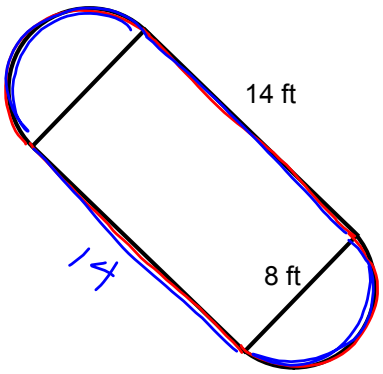
$A = 73.2699\ldots$

$A = 73.3\ ft^2$

$A = \frac{\pi (5)^2}{2} = 39.2699\ldots$

Nov 25-10:02 AM

The garden pictured below is composed of a rectangle and two semicircles. Fencing is to be put around this garden. How many feet of fencing would be needed? Leave your answer in terms of π.



$C = \pi d$

$C = 8\pi$

$P = 28 + 8\pi$ ft

$28 + 8x$

Nov 25-8:59 AM

If the circumference of a circle is 18π inches, what is the area, in square inches of the circle? Leave your answer in terms of π.

(HINT: Find the radius of the circle first!)

$C = \pi d$

$18\pi = \pi d$

$18 = d$

$9 = r$

$A = \pi r^2 \rightarrow \pi(9)^2$

$A = 81\pi$

Nov 23-8:20 AM