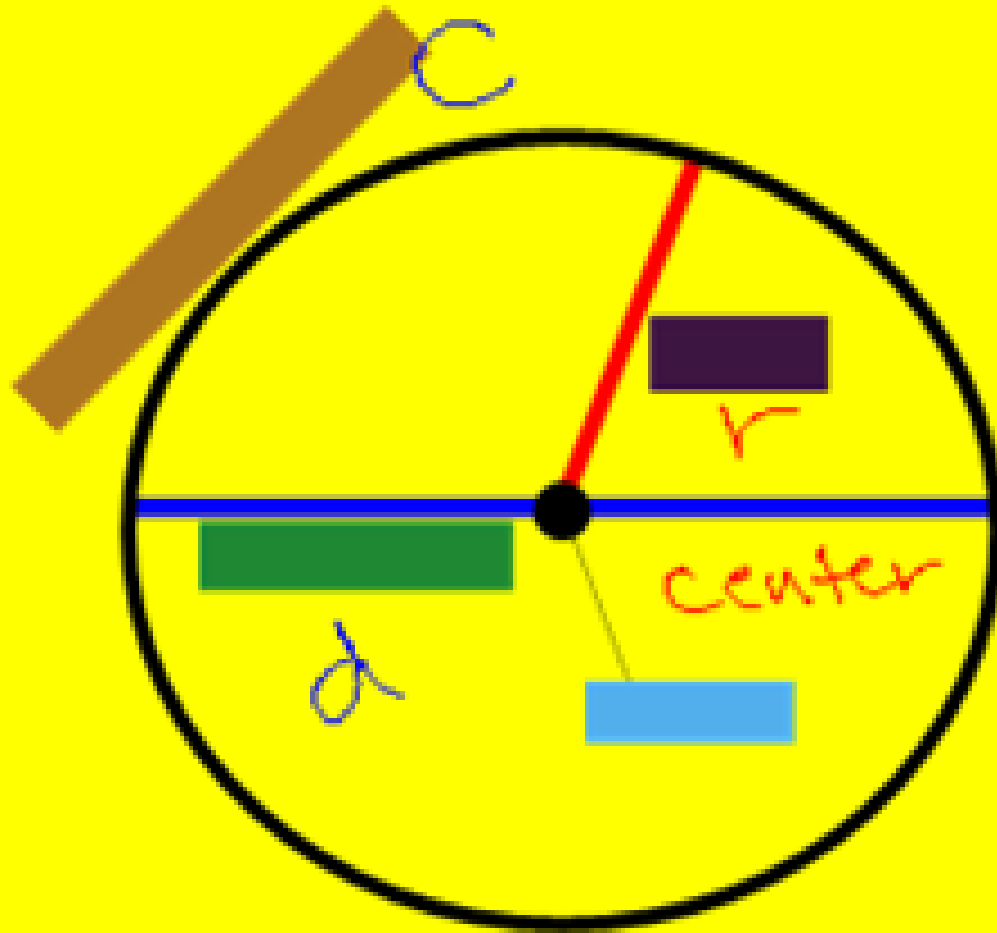


PARTS OF A CIRCLE



CIRCUMFERENCE OF A CIRCLE

[Redacted]

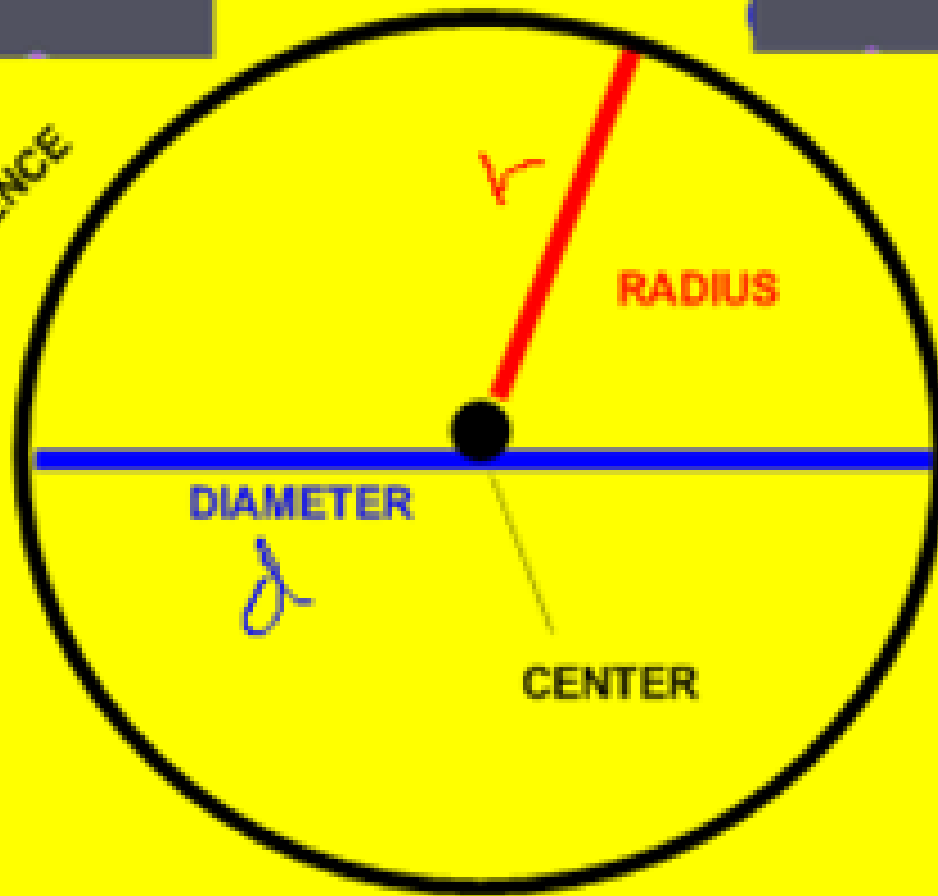
or

[Redacted]

[Redacted]

[Redacted]

CIRCUMFERENCE



RADIUS

DIAMETER

d

CENTER

or
 $C = \pi \cdot d$

$C = 2 \cdot \pi \cdot r$

CIRCUMFERENCE OF A CIRCLE

$$C = 2(3.14)(4)$$

$$C = 25.12 \text{ m}$$

$$C = 2\pi r$$

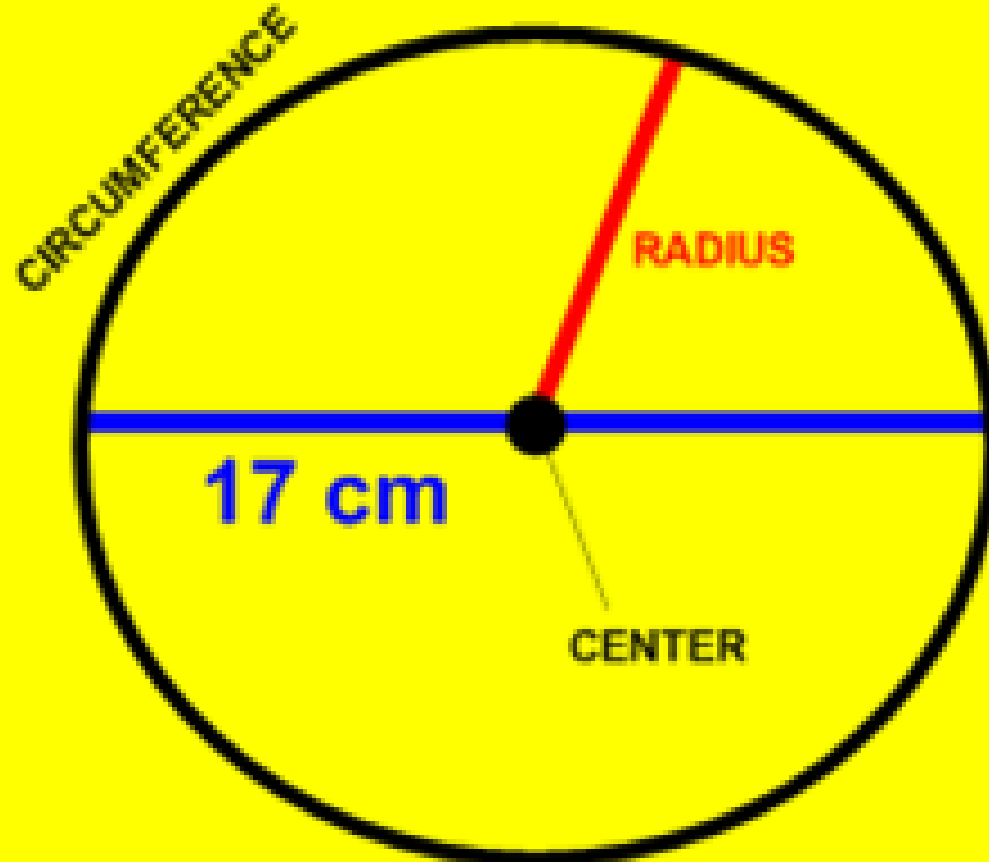


CIRCUMFERENCE OF A CIRCLE

$$C = \pi d$$

$$C = 3.14(17)$$

$$C = 53.38 \text{ cm}$$



CIRCUMFERENCE OF A CIRCLE

Find the circumference if...

Use 3.14 for π

$$C = 2(3.14)(3) = 18.84 \text{ in.}$$

The radius is 3 inches

= 

The radius is 5 cm

31.4 cm

$$C = 2(3.14)(5)$$


$$= 31.4 \text{ cm}$$

$$C = 3.14(4) = 12.56$$

The diameter is 4 units

12.56 units

The diameter is 5 ft.



$$C = 3.14(5)$$

$$= 15.7 \text{ ft}$$

$$C = 2(3.14)(5) = 31.4 \text{ cm}$$

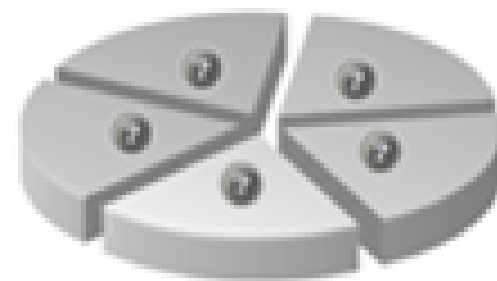
What is the circumference of a circle whose radius is 5 cm?

A 15.7 cm

B 13.4 cm

C 25.7 cm

D 31.4 cm



20.00%
20.00%
20.00%
20.00%
20.00%

2. What is the
difference between
 $2r$ and r^2 ?

$2r$ is 2 times r & r^2 is $r \cdot r$

$$\text{If } r = 6, \text{ then } 2r = \underline{2(6) = 12}$$

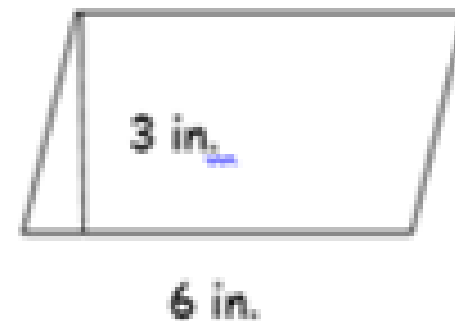
$$\text{and } r^2 = \underline{6(6) = 36}$$

3. What is the formula for finding the area of a parallelogram?

$$A = b \cdot h$$

4. Find the area of the given parallelogram.

$$A = \frac{3(6)}{1}$$
$$= 18 \text{ in}^2$$

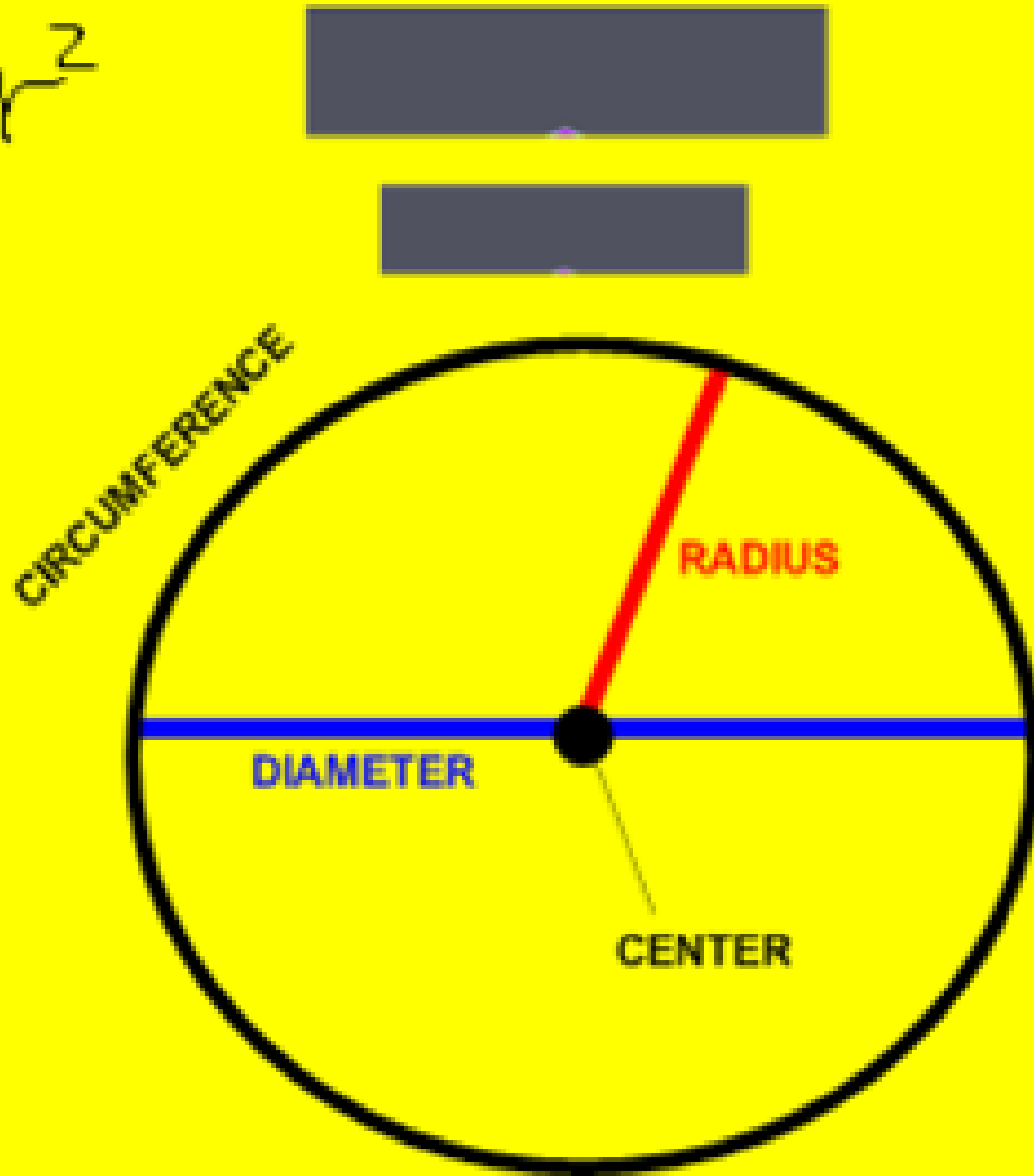


How do you find the
area of a circle?

<https://www.youtube.com/watch?v=YokKp3pwVFc>

AREA OF A CIRCLE

$$A = \pi \cdot r^2$$



AREA OF A CIRCLE

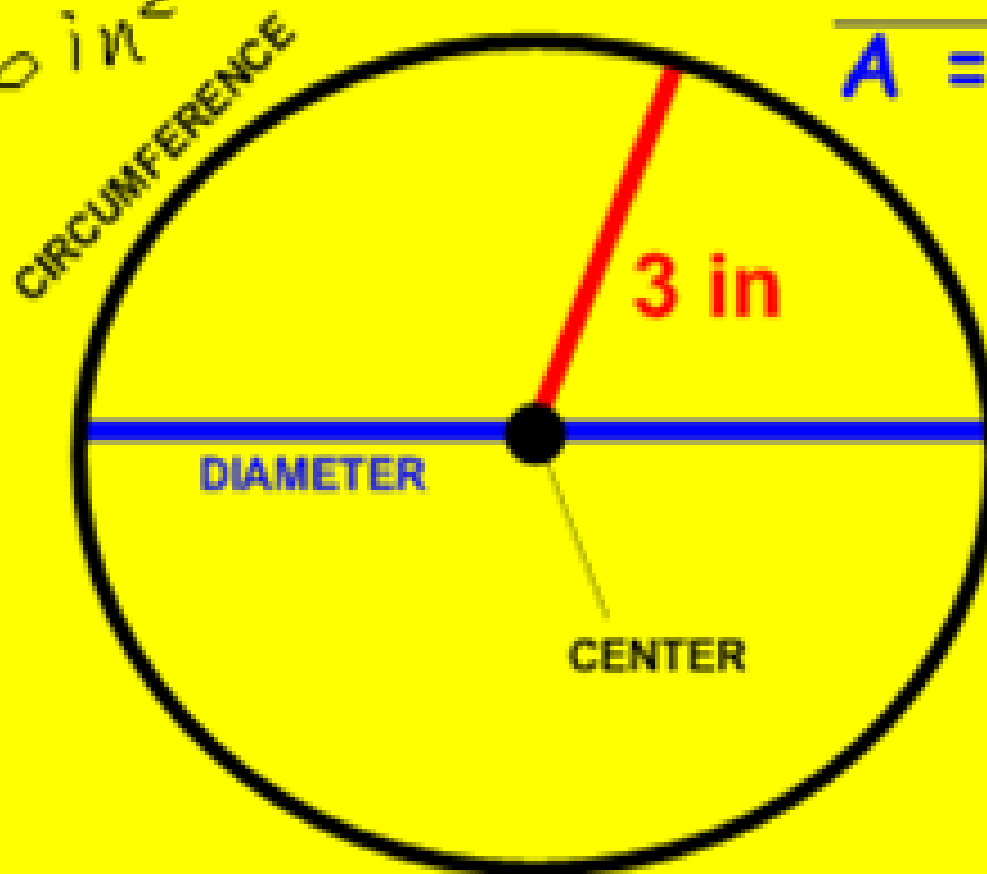
$$A = \pi r^2$$



$$A = 3.14 (3^2)$$

$$A = 28.26 \text{ in}^2$$

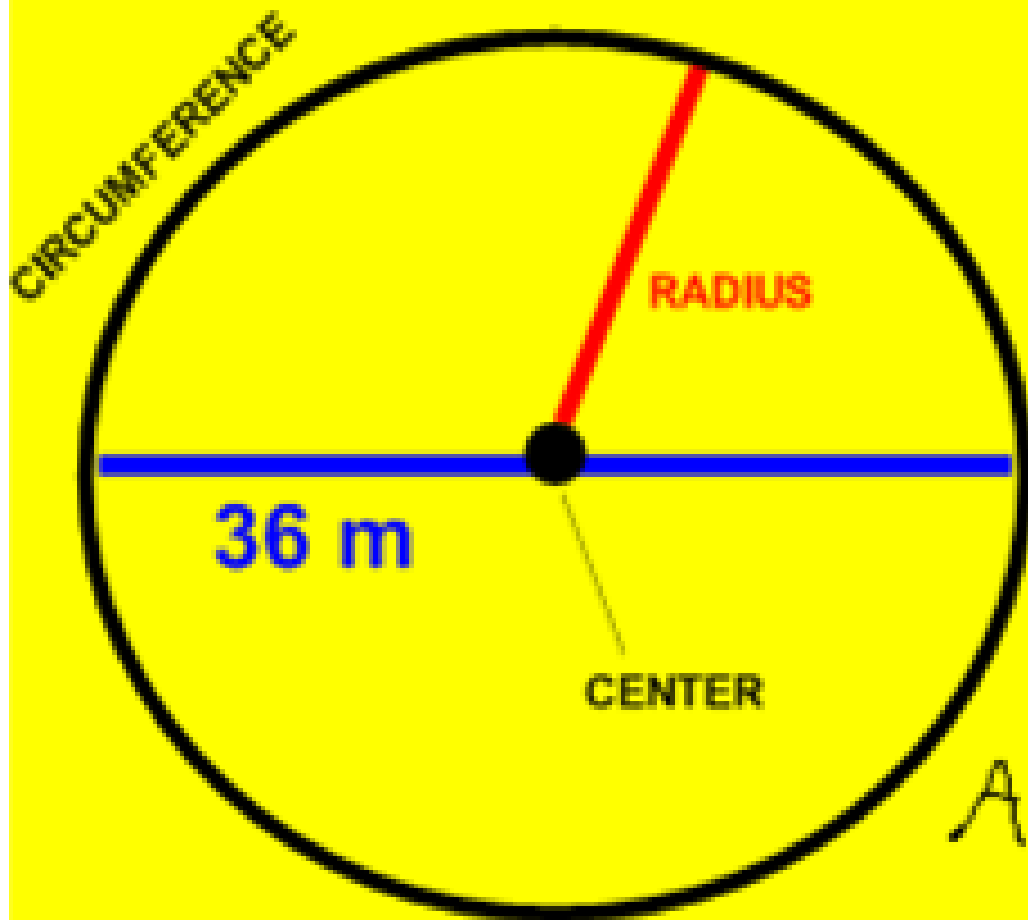
$$A = 28.26 \text{ in}^2$$



AREA OF A CIRCLE

7.

$$A = \pi r^2$$



$$d = 36 \quad \frac{36}{2} = 18$$
$$r = 18$$

$$A = 3.14 (18^2) = 1017.36 \text{ m}^2$$

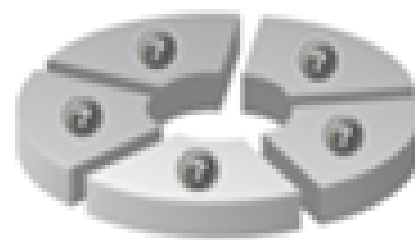
7. What is the area of a circle with a diameter of 36m? Use 3.14 for π , round to the nearest hundredth.

A $A = 4069.44 \text{ m}^2$

B $A = 1017.36 \text{ m}^2$

C $A = 1017.36 \text{ m}$

D $A = 4069.44 \text{ m}$



AREA OF A CIRCLE

8. Find the area if... use 3.14 for π , round to the nearest hundredth.

The radius is 3 inches

$$A = 3.14(3^2) = 28.26 \text{ in}^2$$

The radius is 5 cm

$$A = 3.14(5^2) \\ = 78.5 \text{ cm}^2$$

The diameter is 4 ft.

$$r = 2 \text{ ft} \\ A = 3.14(2^2) = 12.56 \text{ ft}^2$$

The diameter is 12.7 m.

$$r = 6.35 \text{ m} \\ A = 3.14(6.35^2) \\ = 126.61 \text{ m}^2$$

Example 1: A circular oil spill has a diameter of 2.4km. This oil spill is to be enclosed within a length of special flexible tubing. What is the area of the spill, and how long must the tubing be?

$$9. A = \pi \cdot r^2$$

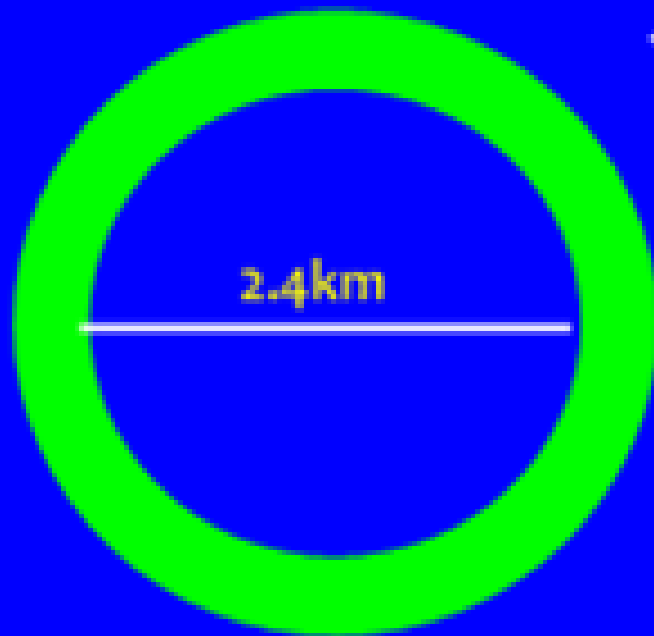
$$r = 1.2 \text{ km}$$

$$A = 3.14(1.2^2)$$

$$C = \pi \cdot d$$
$$= 3.14(2.4)$$

$$C = 7.536 \text{ km}$$

$$A = 4.5216 \text{ km}^2$$



- 9 A circular oil spill has a diameter of 2.4km. This oil spill is to be enclosed within a length of special flexible tubing. What is the area of the oil spill?
-

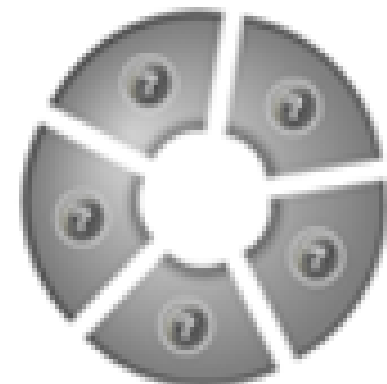
A 18.09 km²

B 7.54 km

C 3.77 km

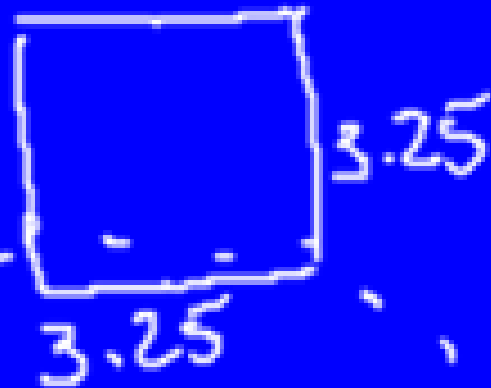
D 4.52 km

E 4.52 km²



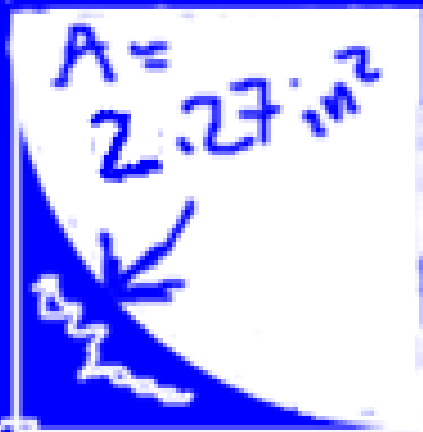
Example 2: A machine part is a square of side 3.25 in. with a quarter-circle removed (see figure). Find the area of the blue section.

10.



$$A_{\square} = 10.5625 \text{ in}^2$$

$$s = 3.25 \text{ in}$$



$$\text{Area} = \begin{array}{r} 10.5625 \\ - 8.29 \\ \hline \end{array}$$

$$\text{Area of Circle} = \pi \cdot r^2$$

$$r = 3.25 \quad A_0 = 3.14(10.5625)$$

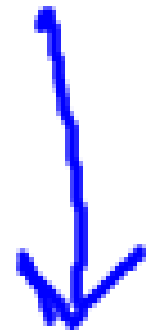
$$= 33.16625 \text{ in}^2$$

$$\text{Area of } \frac{1}{4} \text{ circle}$$

$$\text{is } \frac{33.16625}{4} = 8.29 \text{ in}^2$$

Area of square - Area of $\frac{1}{4}$ circle

10. A machine part is a square of side length 3.25 inches with a quarter circle removed. What is the area of the white section?



A 10.56 in^2

B 33.17 in^2

C 2.55 in^2

D 2.27 in^2

E 2.26 in^2

$$\begin{array}{r} 10.5625 \\ - 8.29 \\ \hline 2.27 \text{ in}^2 \end{array}$$

