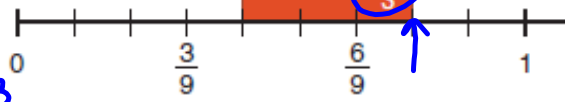


1) BEDMAS: $16 - 100 \div 25$

2) 10% of 16 $\frac{1}{10} \times 16 = 1.6$
 $16 - 4 = 12$
 $0.1 \times 16 = 1.6$

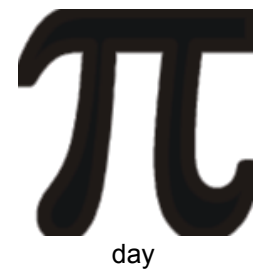
3) 50% of 20 = 10

4) Write a subtraction sentence for: $\frac{7}{9} - \frac{1}{3}$



5) 1, 3 of 9 $9 \div 3 = 3$
 $\frac{1}{3} \times 9 = 3$

6) ~~25%~~ of 25 $25 \div 5 = 5$



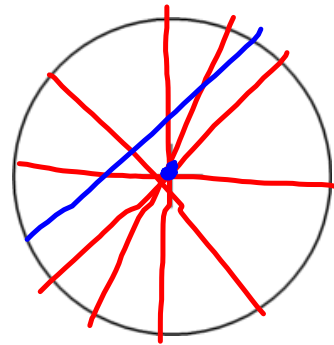
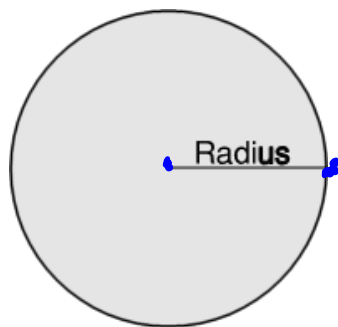
7) Change to a Mixed Fraction:

$\frac{16}{3} = 5\frac{1}{3}$ $\frac{1}{2} \times 20$

8) $14 \times 20 = 280$

9) $12004 \div 4 = 3001$

10) What is the LCM for 3 and 4? 12



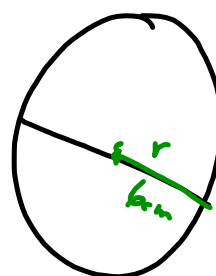
True or False...

1) The diameter of a  is twice (2X) the radius.

True

2) The radius of a  is ~~twice (2X)~~ the diameter.

$\frac{1}{2}$



$r = 4 \text{ cm}$
 $d = 10 \text{ cm}$

2. Draw a circle with each radius without using a compass.

- a) 7 cm b) 4 cm

Label the radius, then find the diameter.

Explain the method you used to draw the circles.

What are the disadvantages of not using a compass?

3. a) A circle has diameter 3.8 cm. What is the radius?

b) A circle has radius 7.5 cm. What is the diameter?

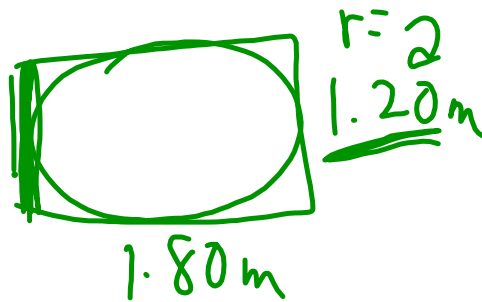
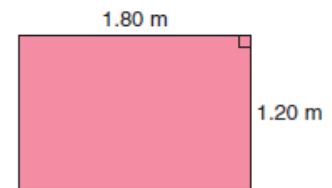
$$3.8 \div 2 = 1.9 \text{ cm}$$

$$15 \text{ cm} = 7.5 + 7.5$$

4. A circular tabletop is to be cut from a rectangular piece of wood that measures 1.20 m by 1.80 m.

What is the radius of the largest tabletop that could be cut?

Justify your answer. Include a sketch.

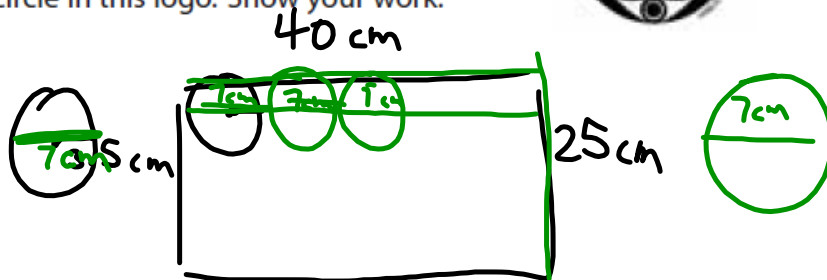


6. A glass has a circular base with radius 3.5 cm.
A rectangular tray has dimensions 40 cm by 25 cm.
How many glasses will fit on the tray?
What assumptions did you make?

7. **Assessment Focus** Your teacher will give you a large copy of this logo. Find the radius and diameter of each circle in this logo. Show your work.

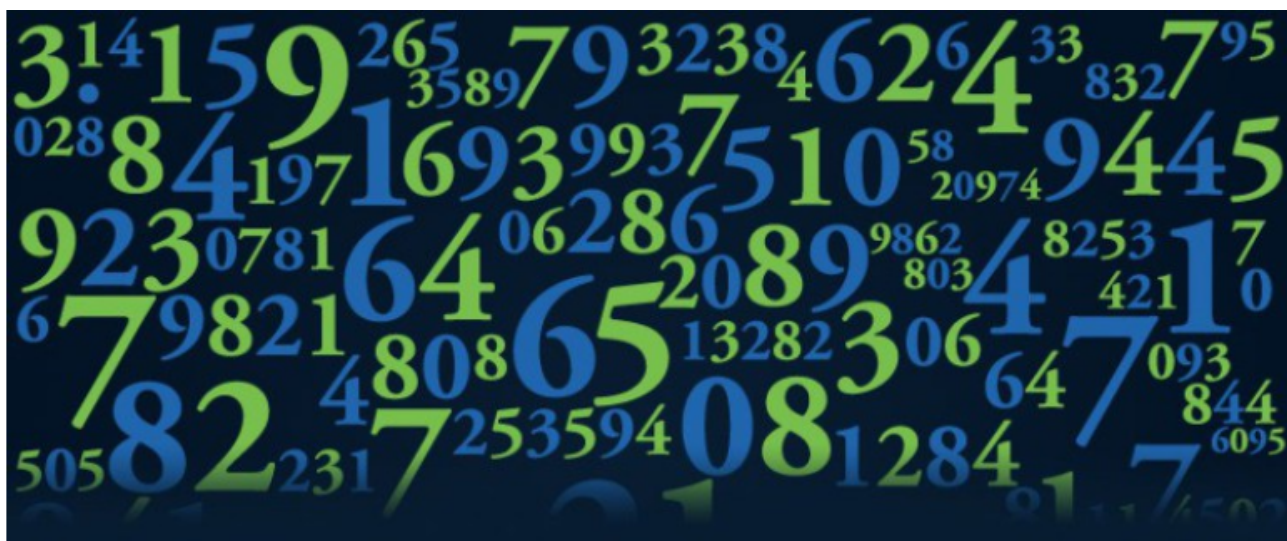


This is the logo for the Aboriginal Health Department of the Vancouver Island Health Authority.



π

π - pi 3.14





6

We are going to "prove" pi (π).

- Needed: 1 cookie
- 1 piece of string
- 1 ruler
- pencil and paper

- 1) Lay your string around the cookie
- 2) Measure the string on a ruler
- 3) That is the Circumference of the cookie

7cm 7.5cm?
 1 / 8cm?

Oreo - 9cm?

C.C. - 18.5cm?
 21cm?

Wagon - 18cm?

22cm?

3
 Oreo - 2.4

 C.C. - 5.5

$$C = \pi d$$

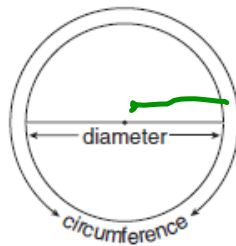
W.N. - 7



Circumference

To find the Circumference (the distance all the way around) of a circle, you follow this formula...

3.14



$$C = \pi d$$

$$\pi \times d$$



C about \times d

the circumference is approximately 3 times the diameter,

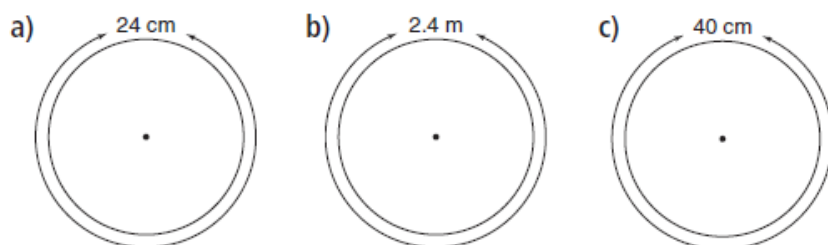
What if you are only given the radius????

True or False - the bigger the radius/diameter, the bigger the Circumference

2. Calculate the diameter and radius of each circle.

Give the answers to two decimal places.

Estimate to check the answers are reasonable.



3. When you estimate to check the circumference, you use 3 instead of π .

Is the estimated circumference greater than or less than the actual circumference?

Why do you think so?

4. A circular garden has diameter 2.4 m.
- The garden is to be enclosed with plastic edging.
How much edging is needed?
 - The edging costs \$4.53/m.
What is the cost to edge the garden?



136 UNIT 4: Circles and Area

5. a) Suppose you double the diameter of a circle.
What happens to the circumference?
- b) Suppose you triple the diameter of a circle.
What happens to the circumference?
- Show your work.

