Which formula will give you the area of a square:

- a.)  $A = s^2$
- b.) A = bh
- c.) A = lw
- d.)  $A = (1/2) d_1 d_2$

## Answer:

all of these

Always, Sometimes, Never

The volume of an oblique pyramid is the same as a right pyramid with the same height.

## Answer:

#### Sometimes

The bases would also need to be the same size

The ratio 500 cm to 20 m simplifies as:

- a.) 25:1
- b.) 1:25
- c.) 5:2
- d.) 25 cm: 1 meter Answer:

d

What type of triangle has sides 7, 10, 14?

- a.) Acute
- b.) Obtuse
- c.) right
- d.) there is no such triangle

Answer:

b

The geometric mean of 9 and 100 is what?

Answer:

30

A cylinder and a cone have the same base and height. What is the ratio of their volumes?

Answer:

3:1

If two circles share only 1 common tangent, what will the relationship between these circles be?

### Answer:

internally tangent

There are 3 ways to prove triangles similar. Pick out the three that are the correct ways to prove triangles similar?

- 1.) SSS
- 2.) ASA

Answer:

3.) AA

1, 3, 4

- 4.) SAS
- 5.) HL
- 6.) CPCTC

If a circle has radius 26 cm and a chord that is 10 cm from the center of the circle, what is the length of this chord?

Answer:

48 cm

If an inscribed angle has measure 72, what is the measure of a central angle that intercepts the same arc?

Answer:

144

The ratio of the volumes of two similar cylinders is 64:27. If the surface area of the larger cylinder is 800 cm., what is the surface area of the smaller cylinder

Answer:

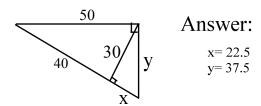
450

The surface area of a sphere is  $324\pi$ . What is the volume of this sphere?

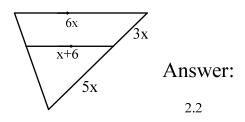
Answer:

 $972 \pi$ 

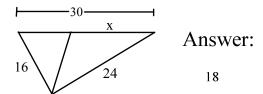
Find the value of x and y.



Find the value of x.



Find the value of x.



$$\sin(40) = \cos(x)$$
 50

$$\sin(35) = \cos(x) \qquad 55$$

$$\sin(20) = \cos(x) \qquad 70$$

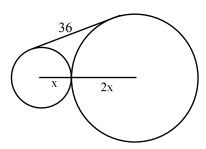
without a calculator

$$\sin (57) = \cos (x)$$
 23

Always, Sometimes, Never

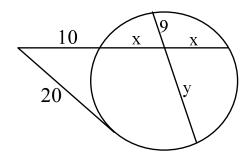
- 1.) Two octagons are similar.
- 2.) An obtuse triangle is similar to a right triangle.
- 3.) An acute triangle is similar to an isosceles triangle.
  - 1.) Sometimes
  - 2.) Never
  - 3.) Sometimes

Find the value of x.



12.7

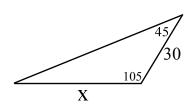
Find the value of x and y.



$$x = 15$$

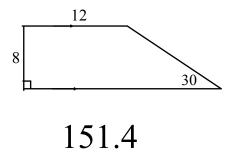
$$y = 25$$

Find the value of x

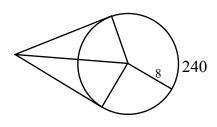


$$30\sqrt{2}$$

Find the area of the following:

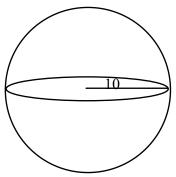


Find the area between the tangents and the circle.



43.8

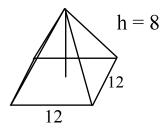
Find the surface area and volume of this sphere:



$$SA = 1256.6$$

$$V = 4188.8$$

# Find the volume



384