

Special Right Triangles - 45, 45, 90

a. $a = 3, b = 3$

b. missing sides:

$$2, 2\sqrt{2}$$

Special Right Triangles - 30, 60, 90

a. missing sides:

$$6, 6\sqrt{3}$$

b. missing sides:

$$\frac{20\sqrt{3}}{3}, \frac{40\sqrt{3}}{3}$$

Equilateral Triangle Area

$$144\sqrt{3}$$

Pythagorean Theorem

a. 13

b. 8.6

Sine, Cosine, and Tangent

a. A. $\sin(A) = \frac{12}{13}$

B. $\cos(A) = \frac{5}{13}$

C. $\tan(A) = \frac{12}{5}$

D. $\sin(B) = \frac{5}{13}$

$$E. \cos(B) = \frac{12}{13}$$

$$F. \tan(B) = \frac{5}{12}$$

b. A. $\sin(A) = \frac{4}{5}$

$$B. \cos(A) = \frac{3}{5}$$

$$C. \tan(A) = \frac{4}{3}$$

$$D. \sin(B) = \frac{3}{5}$$

$$E. \cos(B) = \frac{4}{5}$$

$$F. \tan(B) = \frac{3}{4}$$

Find the value of x in the right triangle

a. 8.4

b. 73.9°

c. 2.7

Right Triangle Word Problem 1

I. 19.5°

Right Triangle Word Problem 2

I. 2.3 feet

More Trig Ratios

B and C are TRUE

Solid Geometry Rotations

I. Cylinder B

II. Sphere: C

III. Cone: A

Prism Volume 1

88 cm^3

Cylinder Volume 2

$200\pi \text{ cm}^2$

Triangular Prism 1

48 cubic units

Cone Volume 1

$5.6\pi \text{ cm}^3$

Similar Triangles 1

- a. They have the same angles.
 - b. $9/r$
 - c. 13.1
-

Pyramid Volume 1

$V = 400$ cubic units

Shape Formed 1

	Circle	Rectangle	Square	Triangle
a cube parallel to the base			X	

A cone perpendicular to the base, passing through the apex				X
a cylinder perpendicular to the base		X		
a sphere in any direction	X			

3 Cross Sections

- a. Figure 2
 - b. Figure 1
 - c. Figure 3
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Pyramid Volume 2

height = 6 units

Volume Dilation 1

$k = 3$

Parallel, Perpendicular, or Neither

- a. Parallel
 - b. Neither
 - c. Neither
 - d. Perpendicular
 - e. Neither
 - f. Perpendicular
-

Circle Equations 1

- a. Not on the circle
- b. Not on the circle

c. On the circle

Circle Equations 2

$$(x + 3)^2 + (y - 2)^2 = 36$$

Circle Equations 3

I. ii

II. v

III. iii

IV. i

V. iv

Transformations 1

I. $(x, y) \rightarrow (-x, y + 3)$

II. reflection over the x-axis and a verticle shift up by 3.

III. a.

Advanced Circles 1

$$\angle ACB = 28^\circ$$

Advanced Circles 2

a. 210°

b. 150°

c. 75°

Advanced Circles 3

$$180^\circ$$

Advanced Circles 4

$$\angle B = 40^\circ$$

Updated Sunday August 4th, 2024.