Name: **Key**
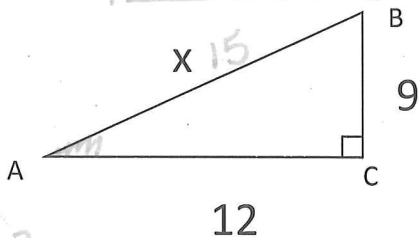
Basic Trig Review 2021

Must include work, the set up and circled final answer in organized manner.

1. Consider the triangle ABC, shown below. Use the Pythagorean Theorem to find the missing side. Then find all trig ratios below and simplify all answers.

$$9^2 + 12^2 = x^2$$
$$\sqrt{225} = x$$

X= 15

$\sin \angle A = \dfrac{3}{5}$ $\dfrac{9}{15} \rightarrow$

$\cos \angle A = \dfrac{4}{5}$ $\dfrac{12}{15}$

$\tan \angle A = \dfrac{3}{4}$ $\dfrac{9}{12}$

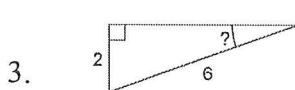$\sin \angle B = \dfrac{4}{5}$ $\dfrac{12}{15}$

$\cos \angle B = \dfrac{3}{5}$ $\dfrac{9}{15}$

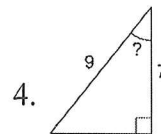$\tan \angle B = \dfrac{4}{3}$ $\dfrac{12}{9}$

Directions: solve for θ (the ?) and round to the nearest tenth. Show your work.

2.

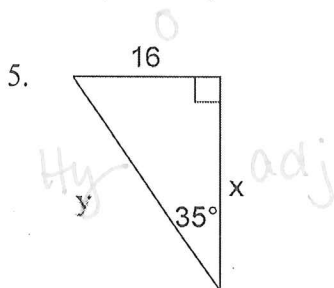$$\tan^{-1}\left(\dfrac{46}{49}\right)$$
$$? = 43.191\ldots$$
$$\boxed{43.2°}$$

3.

$$\sin^{-1}\left(\dfrac{2}{6}\right)$$
$$? = 19.4712$$
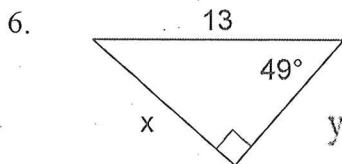$$\boxed{\rightarrow 19.5°}$$

4.
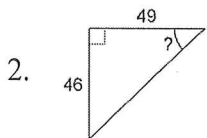
$$\cos^{-1}\left(\dfrac{7}{9}\right)$$
$$? = 38.94244$$
$$\boxed{38.9°}$$

Directions: solve for x and y, rounded to the nearest tenth. Show your work.

5.

Hy, adj

$$\tan(35) = \dfrac{16}{x}$$
$$\boxed{x \approx 22.9}$$

$$\sin 35 = \dfrac{16}{y}$$
$$\boxed{y = 27.91}$$

6.

$$\sin(49) = \dfrac{x}{13}$$
$$\boxed{x = 9.8}$$

$$\cos 49 = \dfrac{y}{13}$$
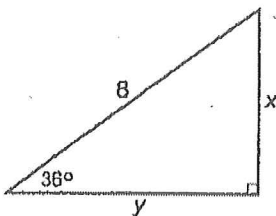$$\boxed{y = 8.5}$$

7.
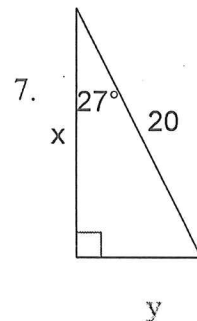
$$\cos(27) = \dfrac{x}{20}$$
$$\boxed{x = 17.8}$$

$$\sin 27 = \dfrac{y}{20}$$
$$\boxed{y = 9.1}$$

Trigonometry Sides and Angles Practice

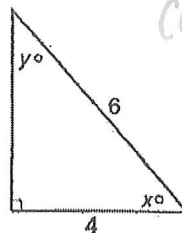Directions: Find all variables and round to the nearest tenth.

1.
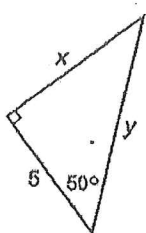
$\sin 36 = \dfrac{x}{8}$

$\cos 36 = \dfrac{y}{8}$

x = _____4.7_____   y = _____6.4_____

2.

$\cos^{-1}\left(\dfrac{4}{6}\right) = x$

$\sin^{-1}\left(\dfrac{4}{6}\right) = y$

x = ____48.2°____   y = ____41.8°____

3.

$\tan 50 = \dfrac{x}{5}$

$\cos 50 = \dfrac{5}{y}$

x = _____6.0_____   y = _____7.8_____

5.9587

4.
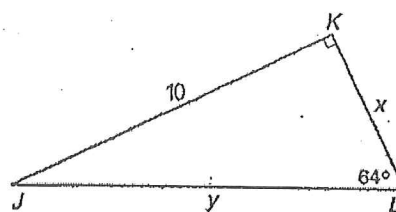
$\tan 64 = \dfrac{10}{x}$

$\sin 64 = \dfrac{10}{y}$

x = _____4.9_____   y = _____11.1_____

5.
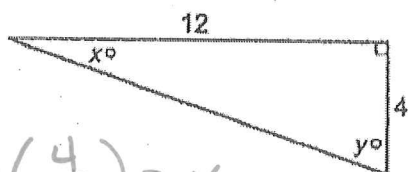
$\tan^{-1}\left(\dfrac{4}{12}\right) = x$

$\tan^{-1}\left(\dfrac{12}{4}\right) = y$

x = ____18.4°____   y = ____71.6°____

6.
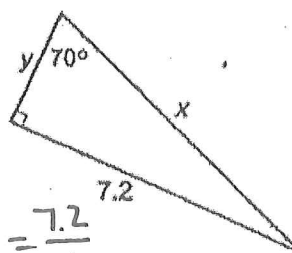
$\sin 70 = \dfrac{7.2}{x}$
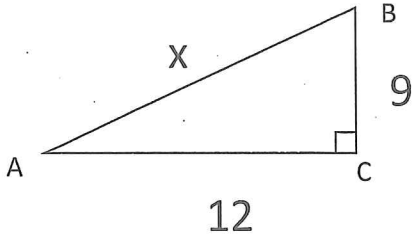
$\tan 70 = \dfrac{7.2}{y}$

x = _____7.7_____   y = _____2.6_____

Name: _____

Basic Trig Review 2021

Must include work, the set up and circled final answer in organized manner.

1. Consider the triangle ABC, shown below. Use the Pythagorean Theorem to find the missing side. Then find all trig ratios below and simplify all answers.
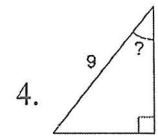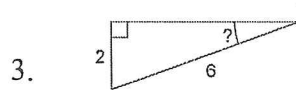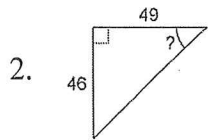

X= _____

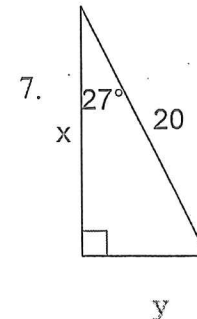sin ∠ A = _____   cos ∠ A = _____   tan ∠ A = _____
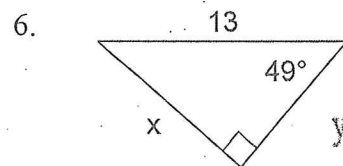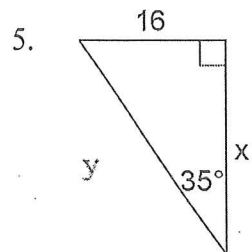
sin ∠ B = _____   cos ∠ B = _____   tan ∠ B = _____

Directions: solve for θ (the ?) and round to the nearest tenth. Show your work.

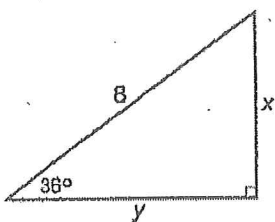2.   3.   4.

Directions: solve for x and y, rounded to the nearest tenth. Show your work.

5.   6.   7.
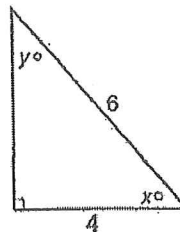
Trigonometry Sides and Angles Practice

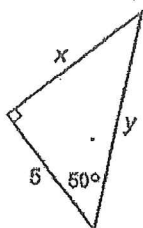Directions: Find all variables and round to the nearest tenth.
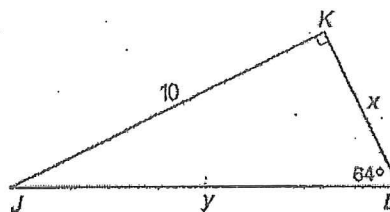
1.

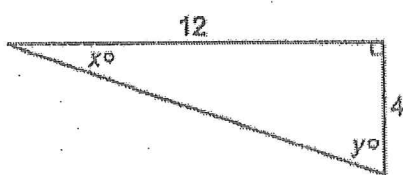
x = _____ y = _____
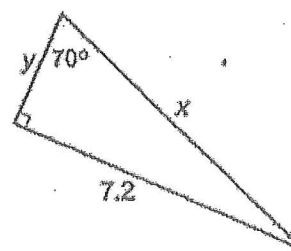
2.

x = _____ y = _____

3.

x = _____ y = _____

4.

x = _____ y = _____

5.

x = _____ y = _____

6.

x = _____ y = _____