Geometry (E) Name KEY

Intro to Trigonometry

Period____

Use a calculator find the value of each trigonometric ratio to the nearest ten-thousandth.

1) sin 45°

0.7071

2) cos 29°

0.8746

3) tan 22°

0.4040

4) cos 47°

0.6820

5) sin 59°

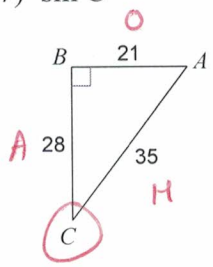
0.8572

6) tan 49°

1.1504

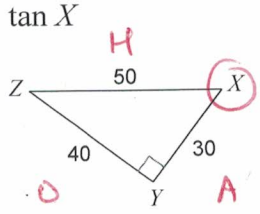
Find the value of each trigonometric ratio.

7) sin C



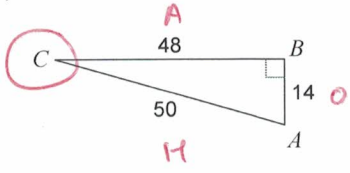
$\frac{21}{35}$ or $\frac{3}{5}$

8) tan X



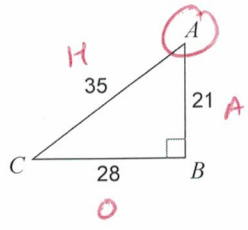
$\frac{40}{30}$ or $\frac{4}{3}$

9) cos C



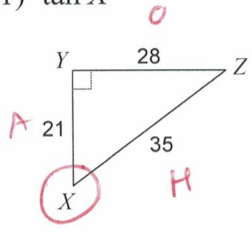
$\frac{48}{50}$ or $\frac{24}{25}$

10) sin A



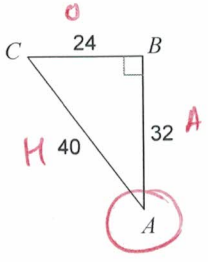
$\frac{28}{35}$ or $\frac{4}{5}$

11) tan X



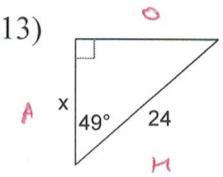
$\frac{28}{21}$ or $\frac{4}{3}$

12) cos A



$\frac{32}{40}$ or $\frac{4}{5}$

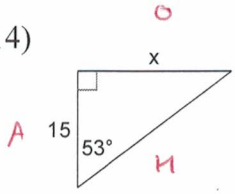
Find the length of the missing side. Round your answer to the nearest tenth.

13) 

$\cos 49° = \frac{x}{24}$

$x = 24 \cdot \cos 49°$

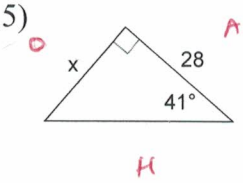
$x = 15.7$

14) 

$\tan 53° = \frac{x}{15}$

$x = 15 \cdot \tan 53°$

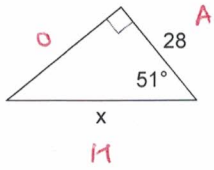
$x = 19.9$

15) 

$\tan 41° = \frac{x}{28}$

$x = 28 \cdot \tan 41°$

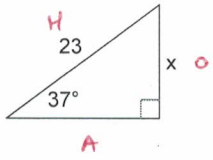
$x = 24.3$

16) 

$\cos 51° = \frac{28}{x}$

$x = \frac{28}{\cos 57°}$

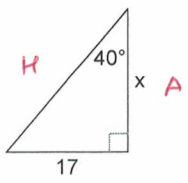
$x = 44.5$

17) 

$\sin 37° = \frac{x}{23}$

$x = 23 \cdot \sin 37°$

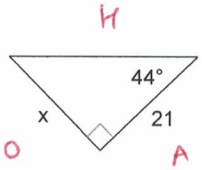
$x = 13.8$

18) 

$\tan 40° = \frac{17}{x}$

$x = \frac{17}{\tan 40°}$

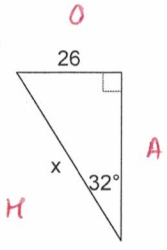
$x = 20.3$

19) 

$\tan 44° = \frac{x}{21}$

$x = 21 \cdot \tan 44°$

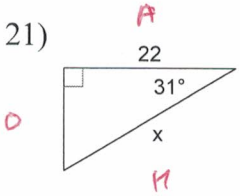
$x = 20.3$

20) 

$\sin 32° = \frac{26}{x}$

$x = \frac{26}{\sin 32°}$

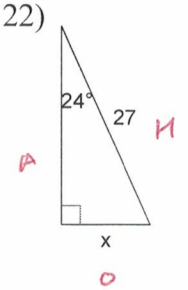
$x = 49.1$

21) 

$\cos 31° = \frac{22}{x}$

$x = \frac{22}{\cos 31°}$

$x = 25.7$

22) 

$\sin 24° = \frac{x}{27}$

$x = 27 \cdot \sin 24°$

$x = 11.0$