

*Make sure you are in degree mode

①

Find: $\frac{18}{30}$
 A. $\sin R = \frac{x}{30}$
 B. $\cos R = \frac{18}{x}$
 C. $\tan R = \frac{18}{x}$

$R = 36.87$

②

Find: $\frac{35}{x}$
 A. $\sin M = \frac{12}{x}$
 B. $\cos M = \frac{35}{x}$
 C. $\tan M = \frac{35}{12}$

$M = 71.08$

③

Find x

$\sin(30) = \frac{x}{12}$

$x = 6$

④

Find x

$\sin 25 = \frac{10}{x}$

$x = \frac{10}{\sin 25} = 23.66$

⑤

Find x

$x = \frac{18}{\cos 15}$

$x = 18.64$

⑥

Find x.

$\cos(42) = \frac{x}{21}$

$x = 15.61$

$x = \cos(42)(21) = 15.61$

⑦

Find x.

$\tan(28) = \frac{x}{25}$

$x = 13.29$

$x = \tan(28)(25) = 13.29$

⑧

Find x

$\tan(63) = \frac{32}{x}$

$x = \frac{32}{\tan(63)}$

$x = 16.305$

⑨ Find x, y, and z. (Inverse)

A. $\sin x = 0.835$ $x = 56.62$
 B. $\cos y = 0.323$ $y = 71.16$
 C. $\tan z = 1.35$ $z = 53.47$

⑩ Find x, y, and z. (Inverse)

A. $\sin x = 0.262$ $x = 15.189$
 B. $\cos y = 0.957$ $y = 16.80$
 C. $\tan z = 0.375$ $z = 20.56$

⑪ Find x

$\sin(x) = \frac{5}{12}$

$x = \sin^{-1}(5/12)$

$x = 24.62$

⑫ Find x

$\sin(x) = \frac{3}{16}$

$x = \sin^{-1}(3/16)$

$x = 10.81$

⑬ Find x.

$\cos(x) = \frac{8}{21}$

$x = \cos^{-1}(8/21)$

$x = 67.61$

⑭ Find x

$\cos(x) = \frac{10}{16}$

$x = \cos^{-1}(10/16)$

$x = 51.32$

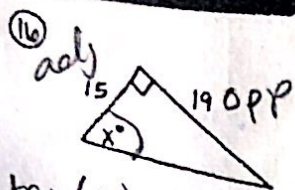
⑮

$\tan(x) = \frac{6}{8}$

Find x.

$x = \tan^{-1}(6/8)$

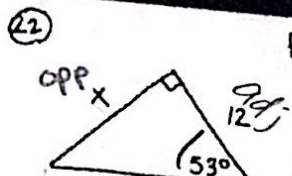
$x = 36.87$



$X = 51.71$

$\tan(x) = \frac{19}{15}$

$X = \tan^{-1}(19/15) = 51.71$



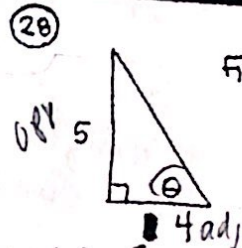
Find x

$X = 15.92$

$\tan(53) = \frac{x}{12}$

$x = \tan(53)(12)$

$X = 15.92$

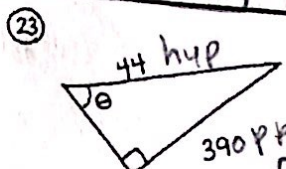


Find theta

$\theta = 51.34$

$\tan(\theta) = \frac{5}{4}$

$\theta = \tan^{-1}(5/4) = 51.34$

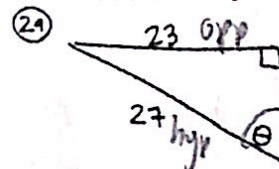


Find theta

$\theta = 62.42$

$\sin(\theta) = \frac{39}{44}$

$\theta = \sin^{-1}(39/44) = 62.42$

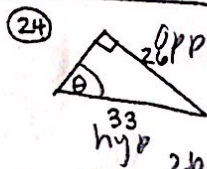


Find theta

$\theta = 58.41$

$\sin \theta = \frac{23}{27}$

$\theta = \sin^{-1}(23/27) = 58.41$

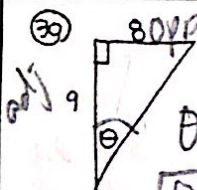


Find theta

$\theta = 51.99$

$\sin(\theta) = \frac{26}{33}$

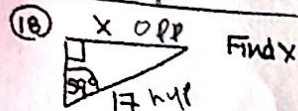
$\theta = \sin^{-1}(26/33) = 51.99$



$\tan \theta = \frac{8}{9}$

$\theta = \tan^{-1}(8/9) = 41.63$

(17) can the sine of an angle ever be equal to 2? why or why not?
 NO, $\sin \theta = \frac{o}{h}$ hyp is greatest side, sine always less than 1.

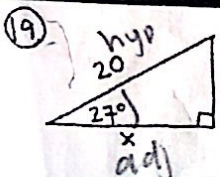


Find x

$\sin(59) = \frac{x}{17}$

$x = \sin(59)(17) = 14.57$

$X = 14.57$

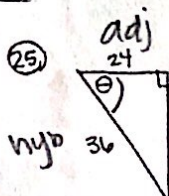


Find x.

$X = 17.82$

$\cos(27) = \frac{x}{20}$

$x = \cos(27)(20) = 17.82$

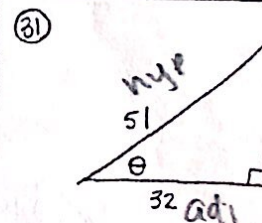


Find theta

$\theta = 48.19$

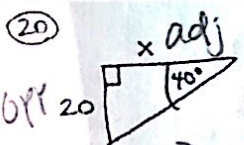
$\cos(\theta) = 24/36$

$\theta = \cos^{-1}(24/36) = 48.19$



$\cos \theta = \frac{32}{51}$

$\theta = \cos^{-1}(32/51) = 51.14$

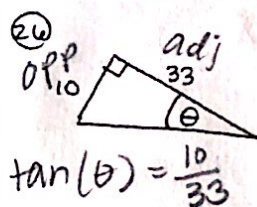


Find x.

$X = 23.84$

$\tan(40) = \frac{20}{x}$

$x = 20 / \tan(40) = 23.84$

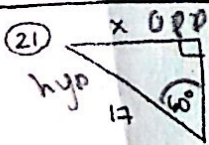


Find theta

$\theta = 16.86$

$\tan(\theta) = \frac{10}{33}$

$\theta = \tan^{-1}(10/33) = 16.86$

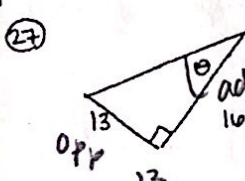


Find x.

$X = 14.72$

$\sin(60) = \frac{x}{17}$

$x = \sin(60)(17) = 14.72$



Find theta

$\theta = 39.09$

$\tan \theta = \frac{13}{16}$

$\theta = \tan^{-1}(13/16) = 39.09$