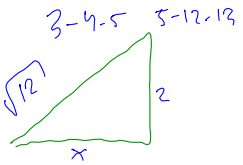
QUIZ TOPICS

Right △ with integer sides — Pythagorean △

$a^2+b^2=c^2$

3-4-5 5-12-13

△ with angles 45°-45°-90° or 30°-60°-90° are called Special △



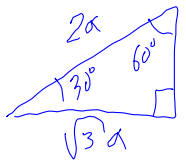
$4+x^2=12$

$-4 \quad -4$

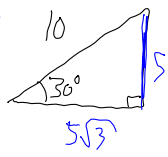
$x^2=8$

$x=\sqrt{8}$

$x=2\sqrt{2}$

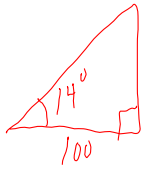


$\sin 30° = \frac{1}{2}$



Tangent

$\tan A = \frac{opp}{adj}$



$\tan 14° = \frac{x}{100}$

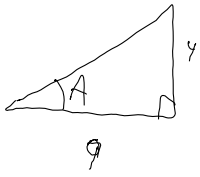
$100 \cdot \tan 14° = x$

$100 \cdot 0.2493 = x$

$x \approx 24.9$

TABLE 0.2493

CALCULATOR 0.24932800



$\tan(A) = \frac{4}{9}$

$A = \tan^{-1}\left(\frac{4}{9}\right)$

angle $= A = \tan^{-1}(0.4545) \approx 24°$

inverse

2nd TAN (4/9)

TAN^{-1}

24°

Sine, Cosine

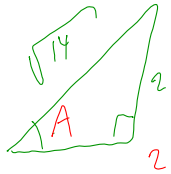
$\sin A = \frac{opp}{hyp}$

$\cos A = \frac{adj}{hyp}$

$\tan A = \frac{opp}{adj}$

SOH CAH TOA

Pick the most convenient.



$\sin A = \frac{2}{\sqrt{14}} = 0.5345$

SINE column

$32° \leftarrow 0.5299$

$A = \sin^{-1}\left(\frac{2}{\sqrt{14}}\right) = 32.3° \approx 32°$

$A = \sin^{-1}(0.5345) = 32.3° \approx 32°$