

NAME

DATE

Find $\sin R$ and $\sin S$; Each Answer as a fraction.
SOHCAHTOA.

$$1. \sin = \frac{\text{OPP}}{\text{HYP}} \quad \sin R = \frac{15}{25} = \frac{3}{5}$$

$$\sin S = \frac{20}{25} = \frac{4}{5}$$

$$2. \sin R = \frac{24}{26} = \frac{12}{13}$$

$$\sin S = \frac{10}{26} = \frac{5}{13}$$

$$3. \sin R = \frac{16}{34} = \frac{8}{17} \quad \sin S = \frac{30}{34} = \frac{15}{17}$$

$$4. \sin R = \frac{40}{58} = \frac{20}{29} \quad \sin S = \frac{42}{58} = \frac{21}{29}$$

$$5. \sin R = \frac{28}{53} \quad \sin S = \frac{45}{53}$$

$$6. \sin R = \frac{44}{117} \quad \sin S = \frac{117}{125}$$

CAT

Find $\cos A$ and $\cos B$.

7. $\cos = \frac{\text{Adj}}{\text{Hyp}}$ $\cos A = \frac{48}{52} = \frac{12}{13}$ $\cos B = \frac{20}{52} = \frac{5}{13}$

8. $\cos A = \frac{12}{37}$

$\cos B = \frac{35}{37}$

9. $\cos A = \frac{24}{30} = \frac{4}{5}$

$\cos B = \frac{18}{30} = \frac{3}{5}$

10. $\cos A = \frac{14}{50} = \frac{7}{25}$

$\cos B = \frac{48}{50} = \frac{24}{25}$

11. $\cos A = \frac{48}{73}$

$\cos B = \frac{55}{73}$

12. $\cos A = \frac{72}{92} = \frac{18}{23}$

$\cos B = \frac{65}{92}$

12

$$TOA = \frac{\text{opp}}{\text{Adj}}$$

use cosine Ratio to find @ variable.

$$13. \sin 57 = \frac{14}{b} \Rightarrow b \frac{\sin 57}{\sin 57} = \frac{14}{\sin 57}$$

$$b = \underline{\underline{16.6931}}$$

$$14. \cos 41 = \frac{d}{17} \quad \text{so } d = 17 \cos 41$$

$$d = \underline{\underline{12.83}}$$

$$15. \tan 36 = \frac{21}{r} \Rightarrow r \frac{\tan 36}{\tan 36} = \frac{21}{\tan 36}$$

$$r = \underline{\underline{28.90}}$$

$$16. \cos 51 = \frac{u}{32} \Rightarrow u = \underline{\underline{20.1383}}$$

$$17. \cos 47 = \frac{x}{12} \Rightarrow x = 12 \cos 47$$

$$\Rightarrow \underline{\underline{8.18398}}$$

$$x = \underline{\underline{8.18}}$$

$$18. \tan 39 = \frac{h}{44} \quad h = 44 \tan 39$$

$$h = \underline{\underline{35.63}}$$