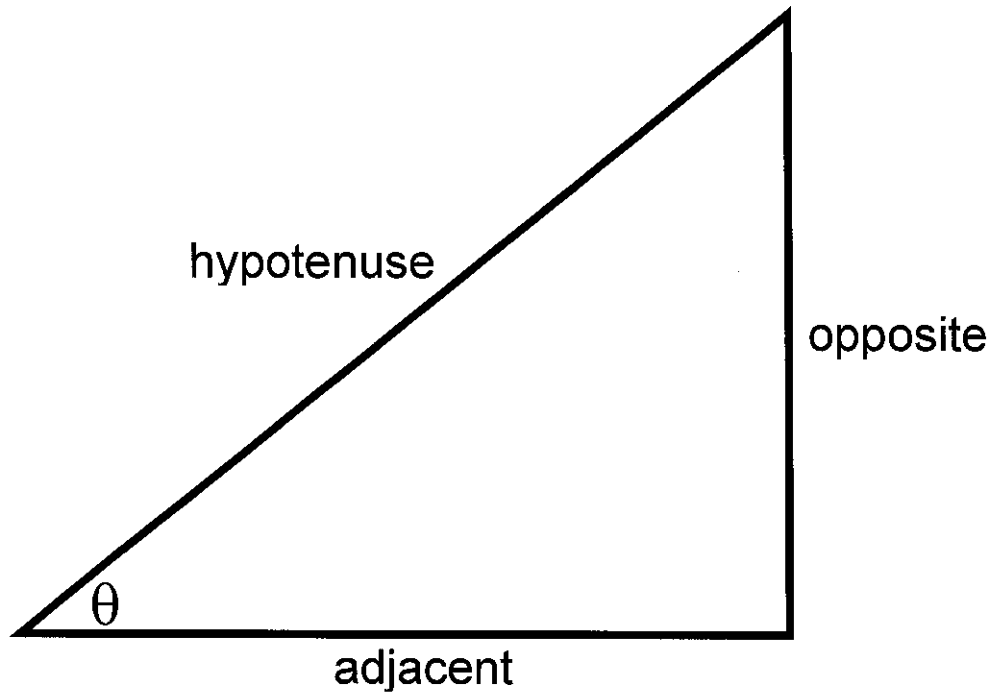


Name: Key

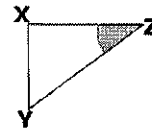
Date: _____

Trigonometry Ratios



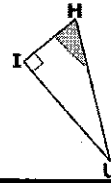
Sine	Cosine	Tangent
SOH CAH TOA		
$S = \frac{O}{H}$	$C = \frac{A}{H}$	$T = \frac{O}{A}$

1. Identify the side that is opposite $\angle Z$ \overline{XY}



2. Identify the side that is adjacent to $\angle Z$ \overline{XZ}

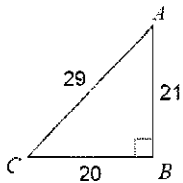
3. Identify the side that is opposite $\angle H$ \overline{IU}



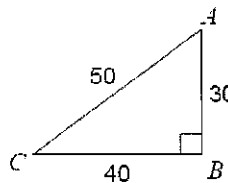
4. Identify the side that is adjacent to $\angle H$ \overline{HI}

Find the value of each trigonometric ratio. Express your answer as a fraction in lowest terms.

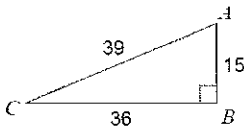
5. $\sin C = \frac{21}{29}$



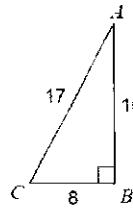
6. $\sin C = \frac{30}{50} = \frac{3}{5}$



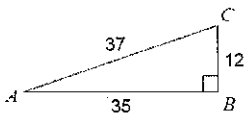
7. $\cos C = \frac{36}{39} = \frac{12}{13}$



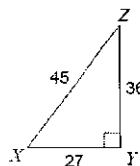
8. $\cos C = \frac{8}{17}$



9. $\tan A = \frac{12}{35}$



10. $\tan X = \frac{36}{27} = \frac{4}{3}$



Use your calculator to find the value of the following:

11. $\sin 20^\circ = \underline{0.342}$

12. $\cos 80^\circ = \underline{0.174}$

13. $\tan 35^\circ = \underline{0.700}$

14. $\sin 51^\circ = \underline{0.777}$

15. $\cos 17^\circ = \underline{0.956}$

16. $\tan 39^\circ = \underline{0.810}$

17. $\sin 43^\circ = \underline{0.681}$

18. $\cos 26^\circ = \underline{0.899}$

19. $\tan 62^\circ = \underline{1.881}$

Find the measure of angle A to the nearest degree.

20. $\sin A = 0.4695 \rightarrow A = \underline{28^\circ}$

21. $\cos A = 0.9511 \rightarrow A = \underline{18^\circ}$

22. $\cos A = 0.3762 \rightarrow A = \underline{68^\circ}$

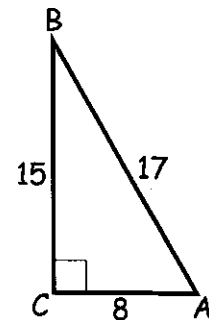
23. $\sin A = 0.9751 \rightarrow A = \underline{77^\circ}$

24. $\tan A = 0.4245 \rightarrow A = \underline{23^\circ}$

25. $\cos A = 0.8835 \rightarrow A = \underline{28^\circ}$

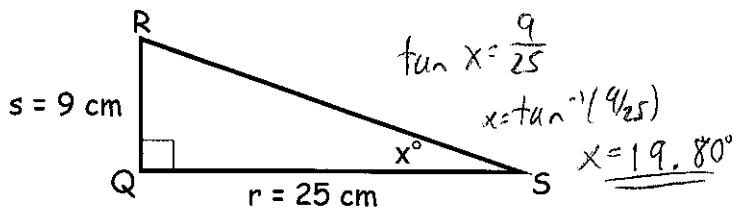
For each of the following find the trigonometric ratio, the decimal value for each ratio, and the measure in degrees of the given angle.

	RATIO	DEGREES
26. $\sin A$	$\frac{15}{17}$	81.9°
27. $\cos A$	$\frac{8}{17}$	61.9°
28. $\tan A$	$\frac{15}{8}$	61.9°
29. $\sin B$	$\frac{8}{17}$	28.1°
30. $\cos B$	$\frac{15}{17}$	28.1°
31. $\tan B$	$\frac{8}{15}$	28.1°

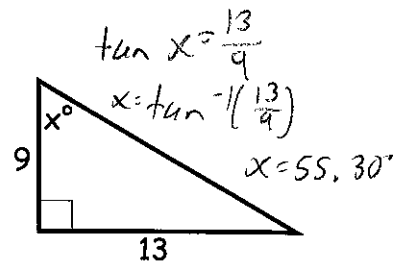


Find x.

32.



33.



34.

