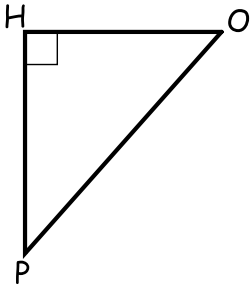


Part I: Using the given triangle in each problem state which SIDE is adjacent and opposite to the given angle. Also, state the hypotenuse.

1.

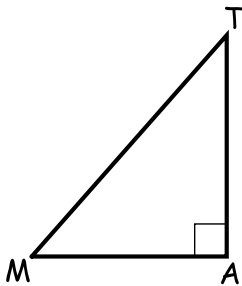


adjacent to $\angle P$ _____ opposite to $\angle P$ _____

adjacent to $\angle O$ _____ opposite to $\angle O$ _____

hypotenuse _____

2.



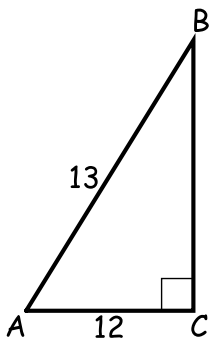
adjacent to $\angle M$ _____ opposite to $\angle M$ _____

adjacent to $\angle T$ _____ opposite to $\angle T$ _____

hypotenuse _____

Part II: Find the missing side length of the right triangle using the Pythagorean Theorem. Then state the three trig ratios for $\angle A$ (leave all answers in fraction form).

3.

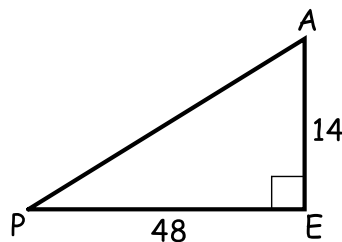


$\sin \angle A =$ _____

$\cos \angle A =$ _____

$\tan \angle A =$ _____

4.

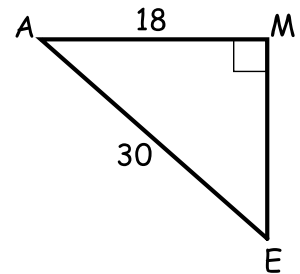


$\sin \angle A =$ _____

$\cos \angle A =$ _____

$\tan \angle A =$ _____

5.



$\sin \angle A =$ _____

$\cos \angle A =$ _____

$\tan \angle A =$ _____

Part III: a) Use a calculator to evaluate the given value to four decimal places.

6. $\sin 42^\circ$

7. $\tan 81^\circ$

8. $\cos 56^\circ$

Part IV: Calculate the equivalent co-functions to the trig ratios below (use your notes)

9. $\cos 81^\circ$

10. $\sin 81^\circ$

11. $\cos 24^\circ$

12. $\sin 75^\circ$

13. $\cos 2^\circ$

14. $\sin 57.5^\circ$

Part V: Use the given ratio and find the given ratio (HINT: draw a triangle)

15. $\sin(\theta) = \frac{3}{4}$, find $\cos(\theta)$

16. $\tan(\theta) = \frac{3}{\sqrt{4}}$, find $\sin(\theta)$

17. $\cos(\theta) = \frac{\sqrt{2}}{7}$, find $\sin(\theta)$

18. $\sin(\theta) = \frac{24}{30}$, find $\tan(\theta)$

19. $\sin(\theta) = \frac{\sqrt{3}}{2}$, find $\tan(\theta)$

20. $\tan(\theta) = 1$, find $\cos(\theta)$