Name: $\qquad$ Date: $\qquad$

## Trigonometry Ratios - Classwork

Draw $\triangle A B C$ where $\angle A B C=90^{\circ}, A B=8, B C=15$, and $A C=17$.

1. What is $\tan C$ ?
2. What is $\sin A$ ?


Draw $\triangle A B C$ where $\angle A C B=90^{\circ}, A C=5$, and $C B=12$.
3. What is the length of $A B$ ?
4. What is $\cos A$ ?
5. What is $\tan B$ ?


Draw $\triangle C A T$ where $\angle A T C=90^{\circ}, C A=53$, and $C T=28$.
6. What is the length of AT?
7. What is $\sin C$ ?
8. What is $\tan A$ ?

Draw $\triangle A B C$ where $\angle B=90^{\circ}$ and $\sin A=\frac{12}{20}$.
9. What is the length of $A B$ ?
10. What is $\tan A$ ?
11. What is $\cos A$ ?

Draw $\triangle H A T$ where $\angle H=90^{\circ}$ and $\tan T=\frac{12}{35}$.
12. What is the length of AT?
13. What is $\sin A$ ?
14. What is cos $T$ ?

In the following problems, DRAW stick-man standing where the angle is and MARK each given side as A (adjacent), O (opposite), or H (hypotenuse). Then TELL which TRIG RATIO you have. You will NOT be solving the problem for $x$ (we haven't learned how YET).
15. Which trig ratio is represented?
A. SIN
B. $\operatorname{COS}$
C. TAN

16. Which trig ratio is represented?
A. SIN
B. COS
C. TAN

17. Which trig ratio is represented?
A. SIN
B. COS
C. TAN

18. Which trig ratio is represented?
A. SIN
B. COS
C. TAN


Find each ratio and be sure to reduce, if possible.


