

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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## Trigonometry Ratios – Homework

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**Draw  $\triangle ABC$  where  $\angle ABC = 90^\circ$ ,  $AB = 8$ ,  $BC = 15$ , and  $AC = 17$ .**

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

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**Draw  $\triangle ABC$  where  $\angle ACB = 90^\circ$ ,  $AC = 5$ , and  $CB = 12$ .**

3. What is the length of  $AB$ ?
4. What is  $\cos A$ ?
5. What is  $\tan B$ ?

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**Draw  $\triangle CAT$  where  $\angle ATC = 90^\circ$ ,  $CA = 53$ , and  $CT = 28$ .**

6. What is the length of  $AT$ ?
7. What is  $\sin C$ ?
8. What is  $\tan A$ ?

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**Draw  $\triangle ABC$  where  $\angle B = 90^\circ$  and  $\sin A = \frac{12}{20}$ .**

9. What is the length of  $AB$ ?
10. What is  $\tan A$ ?
11. What is  $\cos A$ ?

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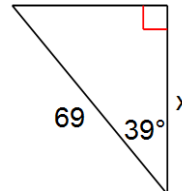
**Draw  $\triangle HAT$  where  $\angle H = 90^\circ$  and  $\tan T = \frac{12}{35}$ .**

12. What is the length of  $AT$ ?
  13. What is  $\sin A$ ?
  14. What is  $\cos T$ ?
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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).

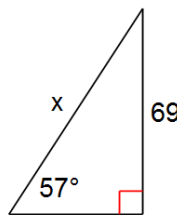
15. Which trig ratio is represented?

- A. SIN
- B. COS
- C. TAN



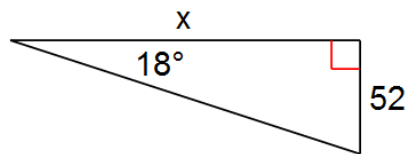
16. Which trig ratio is represented?

- A. SIN
- B. COS
- C. TAN



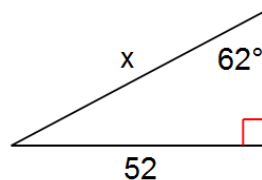
17. Which trig ratio is represented?

- A. SIN
- B. COS
- C. TAN



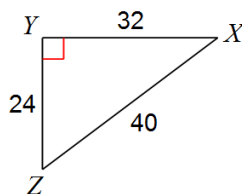
18. Which trig ratio is represented?

- A. SIN
- B. COS
- C. TAN

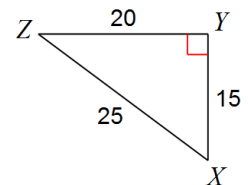


Find each ratio and be sure to reduce, if possible.

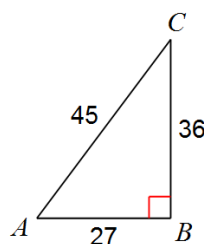
19. Tan Z



20. Sin X



21. Cos A



22. Sin C