Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_

Given that A and B are complementary angles:

**Label** each triangle side lengths using the ratios, and A and B if not already labeled

|  |  |  |
| --- | --- | --- |
| 1. sin A = 3/5 BAcos B= | 2. cos A = 5/6  sin B= | 3. sin A = ¾  cos B= |
| 4. sin B = 3/8cos A= | 5. sin A = 20/37 cos B= | 6. sin B = 25/38, what other trig ratio = 25/38?\_\_\_\_\_\_\_\_ |
| 7. If cos A = 17/35, what other trig ratio = 17/35?\_\_\_\_\_\_\_\_ | 8. If sin A = 38/91, what other trig ratio = 38/91?\_\_\_\_\_\_\_\_\_ | 9. If cos B= 16/25, what other trig ratio = 16/25?\_\_\_\_\_\_\_ |
| 10. If sin A = 8/17, what other trig ratio = 8/17?\_\_\_\_\_\_\_\_ C$\overbar{AC}=$\_\_\_\_\_\_\_\_cos A =\_\_\_\_\_\_ | 11. If cos B = 3/5, what other trig ratio = 3/5?\_\_\_\_\_\_\_\_ $\overbar{AC}=$\_\_\_\_\_\_\_\_Csin B =\_\_\_\_\_\_ | 12. If sin B = 5/13, what other trig ratio = 5/13?\_\_\_\_\_\_\_\_ C$\overbar{AC}=$\_\_\_\_\_\_\_\_cos A =\_\_\_\_\_\_ |
| 13. If sin A = 30/34, what is cos B? In your own words, explain why. |

Find the missing angle.

|  |  |  |
| --- | --- | --- |
| 14. $$sin20°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$$ | 15. $$sin50°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$$ | 16. $cos32°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ |
| 17. $sin 47.2°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$ | 18. $cos12.6°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ | 19. $sin47°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ |
| 20. $cos51.2°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_°$ | 21. $cos38°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ | 22. $sin 82.5°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$ |

Find all trig ratios for each right triangle.

A

B

8

6

10

|  |  |
| --- | --- |
| 23.13512 sin A= \_\_\_\_\_\_ sin B = \_\_\_\_\_ cos A = \_\_\_\_\_ cos B =\_\_\_\_\_ tan A =\_\_\_\_\_\_ tan B = \_\_\_\_\_ | 24. sin A= \_\_\_\_\_\_ sin B = \_\_\_\_\_ cos A = \_\_\_\_\_ cos B =\_\_\_\_\_ tan A =\_\_\_\_\_\_ tan B = \_\_\_\_\_ |
| 25.βθ534 $\sin(θ)=$\_\_\_\_\_\_ $\sin(β)=$ \_\_\_\_\_ $\cos(θ)=$ \_\_\_\_\_ $\cos(β)=$\_\_\_\_\_ $\tan(θ)=$ \_\_\_\_\_\_ $\tan(β)=$ \_\_\_\_\_ | 26.  sin A= $\frac{21}{35}$ sin B = \_\_\_\_\_AB cos A = \_\_\_\_\_ cos B =\_\_\_\_\_ tan A = \_\_\_\_\_ tan B = $\frac{28}{21}$  |
|  |