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 $θ$ = 5/6  Sin$(90-θ)$= | 3. sin A = 3/5 cos B= |
| 4. sin$(90-θ)$ = 3/8cos$ θ $= | 5. sin $θ$ = 20/37 cos $(90-θ$) = | 6. sin B = 25/38, what other trig ratio = 25/38?A\_\_\_\_\_\_\_\_B |
| 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 $\overbar{AC}=$\_\_\_\_\_\_\_\_Ccos A =\_\_\_\_\_\_ | 11. If cos B = 3/5 $\overbar{AC}=$\_\_\_\_\_\_\_\_Csin B =\_\_\_\_\_\_ | 12. If tan B = 5/12, $\overbar{AB}=$\_\_\_\_\_\_\_\_Ccos B =\_\_\_\_\_\_ |
| 13. If sin $θ$ = 30/34, what is cos $(90-θ)$? In your own words, explain why. |

Find the missing angle.

|  |  |  |
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| 14. $$sin20°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$$ | 15. $$sin50°=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_°$$ | 16. $cos32°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ |
| 17. $cos51.2°=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_°$ | 18. $cos38°45'=sin⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ | 19. $sin 82°5'30"=cos⁡\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_°$ |

Find all trig ratios for each right triangle.

|  |  |
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| 20. sin A= \_\_\_\_\_\_ sin B = \_\_\_\_\_ cos A = \_\_\_\_\_ cos B =\_\_\_\_\_13512 tan A =\_\_\_\_\_\_ tan B = \_\_\_\_\_ | 21. sin A= \_\_\_\_\_\_ sin B = \_\_\_\_\_ cos A = \_\_\_\_\_ cos B =\_\_\_\_\_AB8610 tan A =\_\_\_\_\_\_ tan B = \_\_\_\_\_ |
| 22. $\sin(θ)=$\_\_\_\_\_\_ $\sin((90-θ))=$ \_\_\_\_\_ $\cos(θ)=$ \_\_\_\_\_ $\cos((90-θ))=$\_\_\_\_\_ $\tan(θ)=$ \_\_\_\_\_\_ $\tan((90-θ))=$ \_\_\_\_\_θ534 | 23.  sin A= $\frac{21}{35}$ sin B = \_\_\_\_\_ cos A = \_\_\_\_\_ cos B =\_\_\_\_\_ tan A = \_\_\_\_\_ tan B = $\frac{28}{21}$ AB |

Answers rounded to the nearest thousandth.

24. A and B are complimentary angles. If Cos(A)=10/27, what is Tan(B)?

25. A and B are complimentary angles. If Sin(A)=7/11, what is Cos(A)?