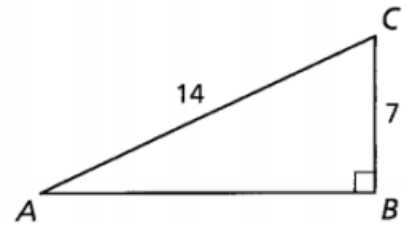


Name _____ Date _____

Day 3 – Trig Ratios: Given Info and Cofunctions

Using the figure at the right, answer the following questions:

1. What do you need to find in order to "solve the right triangle"?
2. What is the length of AB?



We can use trigonometric ratios to find the $m\angle A$ and $m\angle C$

3. Find the sine, cosine, and tangent of $m\angle A$?
4. Find the sine, cosine, and tangent of $\angle C$?

How do they compare?

Draw $\triangle ABC$ where $\angle ACB = 90^\circ$, $AC = 10$, and $CB = 24$.

5. What is the length of AB?
6. What is $\cos A$?
7. What is $\sin B$?

Write each trig function in terms of its co-function.

- | | |
|-----------------------|-----------------------|
| 8. $\sin 64 =$ _____ | 9. $\cos 84 =$ _____ |
| 10. $\cos 38 =$ _____ | 11. $\sin 24 =$ _____ |
| 12. $\cos 72 =$ _____ | 13. $\sin 45 =$ _____ |
| 14. $\sin x =$ _____ | 15. $\cos x =$ _____ |

Multiple Choice:

16. In right triangle ABC $\sin A = 0.8$. What is the $\cos B$?

- A. 0.8
- B. 0.6
- C. 1.0
- D. 0.5

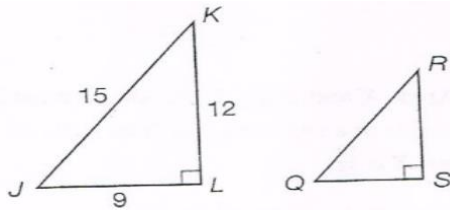
17. Identify the **two equal** trigonometric ratios from the options given:

- A. $\sin 30$
 - B. $\cos 30$
 - C. $\cos 60$
 - D. $\tan 30$
-

18. Select the **two** possible simplifications of: $\sin 31 + \cos 59$

- A. $2 \sin 31$
- B. $\sin 31 \times \cos 59$
- C. $2 \cos 59$
- D. $\cos 118$

19. Triangle JKL is similar to triangle QRS.



Which of the following must be true?

- A. $\sin J = \sin R = 4/5$
- B. $\sin J = \sin S = 4/5$
- C. $\cos K = \cos Q = 4/5$
- D. $\cos K = \cos R = 4/5$

20. Angle X and Angle Y are complementary angles in a right triangle. The value of $\tan x$ is $14/48$. What is the value of $\sin Y$?

- A. $14/48$
- B. $14/50$
- C. $48/50$
- D. $50/48$

21. If the $\sin A = 3/5$, the $\cos (90 - A) = \underline{\hspace{1cm}}?$

- A. $5/3$
- B. $3/5$
- C. $4/3$
- D. $3/4$

22. In the triangle, $\sin y = 5/8$, which of the following is true?

- A. $\tan y = 5/8$
- B. $\cos y = 5/8$
- C. $\sin (90 - y) = 5/8$
- D. $\cos (90 - y) = 5/8$

