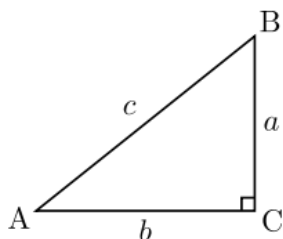


Show all work and simplify all answers before circling/boxing them. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for full credit.

Due next class. Students who turn assignments in late forfeit their ability to rewrite those problems for credit.

Use the following right triangle to answer questions 1 – 2



1. Find the 6 standard trigonometric functions for angle A if $a = 12$ and $c = 13$. Then find the 6 standard trigonometric functions for B.
2. Find the 6 standard trigonometric functions for angle A if $a = 4$ and $b = 6$.
3. Convert from degrees to radians: 105°
4. Convert from degrees to radians: 56°
5. Convert from radians to degrees: $\frac{7\pi}{2}$
6. Convert from radians to degrees: $\frac{2}{3}$
7. Find the length of the arc intercepted by a central angle of 240° in a circle of radius $r = 5\text{cm}$.
8. Find the measure, in degrees, of the angle in a circle of radius 5 inches with corresponding arc length of 12 inches.
9. An isosceles right triangle has interior angles of 45° . Use the fact that an isosceles triangle has two side lengths that are equal to find the 6 trigonometric functions for $\theta = 45^\circ$.