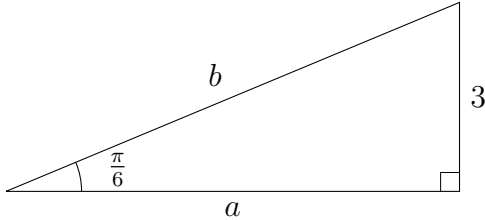


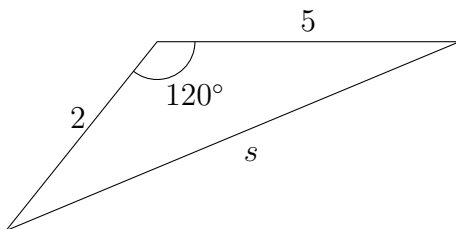
Show work for all problems; use the back of the sheet if necessary. All trigonometric evaluations used in these problems are computable values and final answers on all questions except #4 should not contain unsimplified trigonometric expressions.

1. (4 points) In the following right triangle (not drawn to scale), find the values of a and b . Label which is which.



2. (1 point) Convert the angle measure 54° to radians.
3. (1 point) Convert the angle measure $\frac{5\pi}{18}$ to degrees.
4. (5 points) Verify the identity $(\tan y + \cot y) \sin y = \sec y$.

5. (4 points) In the following triangle (not drawn to scale), find the value of s .



6. (5 points) In the following triangle (not drawn to scale), find the values of θ and x .

