Quiz 6  Algebra & Trig  4/13/2003

Each problem is worth 5 points. For full credit provide complete justification for your answers.

1. If a right triangle has an angle of measure 20° and the side opposite that angle has length 5, what are the lengths of the other two sides (accurate to two decimal places)?

\[ \tan 20 = \frac{5}{x} \]
\[ x = 13.74 \]
\[ \sin 20 = \frac{5}{y} \]
\[ y = 14.62 \]

2. If a right triangle has sides of length 5, 12, and 13, what are the measures of the angles (accurate to two decimal places)?

\[ \tan \alpha = \frac{12}{5} \]
\[ \alpha = 67.38^\circ \]
\[ \sin \beta = \frac{5}{13} \]
\[ \beta = 22.62^\circ \]
\[ \Delta = 90^\circ \]