

$$\boxed{19} \quad a^2 = b^2 + c^2 - 2bc \cos \alpha = 24.1^2 + 15.8^2 - 2(24.1)(15.8) \cos 10^\circ 30' \Rightarrow a = \sqrt{830.45 - 761.56 \cos 10^\circ 30'} \approx 9.03562$$

$$b^2 = a^2 + c^2 - 2ac \cos \beta \Rightarrow \cos \beta = \frac{b^2 - a^2 - c^2}{-2ac} \Rightarrow \beta = \cos^{-1} \left(\frac{24.1^2 - 9.03562^2 - 15.8^2}{-2(9.03562)(15.8)} \right) \approx 150.91785^\circ$$

$$\gamma = 180^\circ - 10.5^\circ - 150.91785^\circ \approx 18.58215^\circ$$

$$a \approx 9.0, \quad \beta \approx 150.9^\circ, \quad \gamma \approx 18.6^\circ$$