Name _____   Date_____

Lesson 10: Conditions for a Unique Triangle—Two Angles and a Given Side

1. $\triangle ABC$ has angles $\angle A = 50°$ and $\angle C = 90°$ and side $AB = 5.5$ cm. Draw triangle $\triangle A'B'C'$ under the same condition. Under what condition is $\triangle A'B'C'$ drawn? Use your construction to explain why $\triangle A'B'C'$ is or is not identical to $\triangle ABC$.

2. $\triangle PQR$ has angles $\angle Q = 25°$ and $\angle R = 40°$ and side $QR = 6.5$ cm. Draw triangle $\triangle P'Q'R'$ under the same condition. Under what condition is $\triangle P'Q'R'$ drawn? Use your construction to explain why $\triangle P'Q'R'$ is or is not identical to $\triangle PQR$.