Name: $\qquad$ Date: $\qquad$

Learning Goal 2.2 Solve problems involving multiple right triangles.

Recap: Angles of Elevation and Depression

Example Calculate the measure of $\Varangle A B C$, to the nearest degree.


Example What is the length of side $y$ in the following diagram, to the nearest tenth of a centimetre?


Example The Saskatoon Balloon Festival is organized by Sundance Balloons and the Canada Remembers Airshow. In Kinsmen Park, Wayne has tethered his balloon to the ground at points B, C, and D, using three guy wires, as shown.
a. What is the length of $C D$, to the nearest tenth of a metre?

b. What is the height of the hot air balloon, to the nearest tenth of a metre?
c. Could you have found the height of the hot air balloon without calculating CD? Justify your response.

