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## Section 2.3 Extra Practice

Where necessary, express lengths to the nearest tenth of a unit and angle measures to the nearest degree.

1. Determine the length of $A B$ in each triangle.
a)

b)

2. Determine the measure of the indicated angle.

b) $\angle$ G

3. Sketch each triangle. Then, determine the indicated value.
a) In $\triangle \mathrm{ABC}, \mathrm{AB}=80 \mathrm{~m}, \mathrm{AC}=100 \mathrm{~m}$, and $\angle \mathrm{B}=40^{\circ}$. Determine $\angle \mathrm{C}$.
b) In $\triangle \mathrm{PQR}, \mathrm{PQ}=15.1 \mathrm{~cm}, \angle \mathrm{P}=25^{\circ}$, and $\angle \mathrm{Q}=70^{\circ}$. Determine QR .
4. Solve each triangle by determining the unknown sides and angles.
a)

b)

5. Sketch each triangle. Then, determine the unknown side and angles. If two solutions are possible, give both.
a) In $\triangle \mathrm{ABC}, \mathrm{AB}=15 \mathrm{~m}, \mathrm{BC}=5 \mathrm{~m}$, and $\angle \mathrm{A}=20^{\circ}$.
b) In $\triangle \mathrm{PQR}, \mathrm{PQ}=12.5 \mathrm{~cm}, \mathrm{QR}=13.0 \mathrm{~cm}$, and $\angle \mathrm{P}=103^{\circ}$.
c) In $\triangle \mathrm{DEF}, \mathrm{DE}=8.0 \mathrm{~cm}, \mathrm{EF}=6.0 \mathrm{~cm}$, and $\angle \mathrm{D}=40^{\circ}$.
d) $\mathrm{In} \triangle \mathrm{RST}, \mathrm{RS}=4.3 \mathrm{~mm}, \mathrm{ST}=4.0 \mathrm{~mm}$, and $\angle \mathrm{R}=65^{\circ}$.
6. Determine the area of $\triangle T U V$, to the nearest square centimetre.

