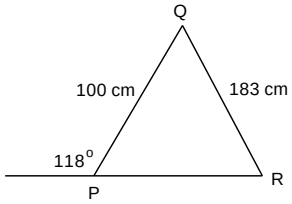
EXAM REVIEW

CHAPTER 5: Trigonometry & Acute Angles

1. Use a calculator to evaluate to four decimal places.
   (a) $\cos 11°$ (b) $\tan 83°$ (c) $\sin 39°$

2. Use a calculator to find θ to the nearest degree.
   (a) $\cos\theta = 0.3862$ (b) $\tan\theta = 1.2375$

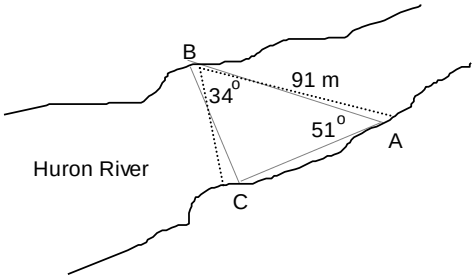
3. Determine all the interior angles in ΔPQR correct to the nearest degree.



4. Solve ΔJKL where $j = 17.0\ cm$, $k = 18.0\ cm$, and $l = 21.0\ cm$. Include a diagram.

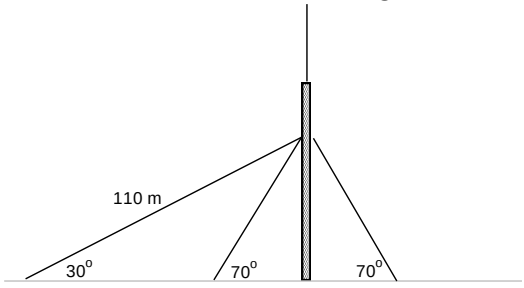
5. A $2.7\ m$ ladder can be used safely only at an angle of $70°$ with the horizontal. How high, to the nearest metre, can the ladder reach? Include a diagram.

6. A surveyor wants to calculate the distance BC across a river. He selects a position, A, so that BA is $91\ m$, and he measures $\angle ABC$ and $\angle BAC$ as $34°$ and $51°$, respectively. Calculate the distance BC to the nearest tenth of a metre.



7. Two sides of a parallelogram measure $6.5cm$ and $8.0cm$. The longer diagonal is $11.3cm$ long. How long, to the nearest centimeter, is the other diagonal? (Include a diagram).

8. A temporary support cable for a radio antenna is $110\ m$ long and has an angle of elevation of $30°$. Two other support cables are already attached, each at an angle of elevation of $70°$. How long, to the nearest centimetre, is each of the shorter cables?



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