

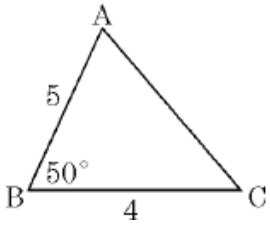
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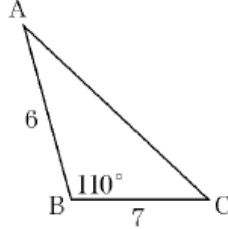
Pre-Calculus 11: HW Section 2.4 Cosine Law

1. Given each triangle, find the value of the indicated side or angle.

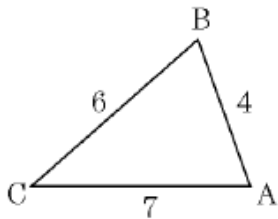
a) $AC =$



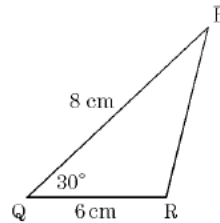
b) $AC =$



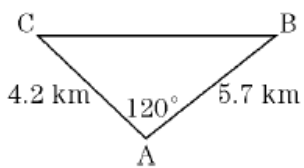
c) $\angle B =$



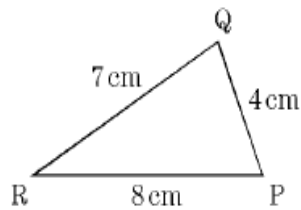
d) $PR =$



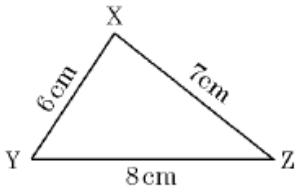
e) $\angle B =$



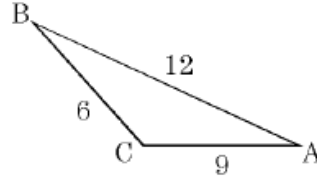
f) $\angle Q =$



g) $\angle z =$

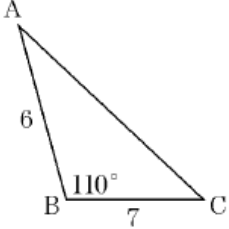


h) (Obtuse) $\angle C =$



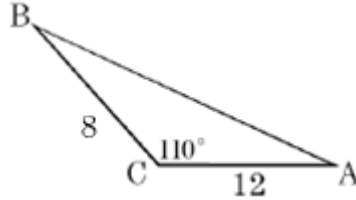
i) $\angle A =$

AC =



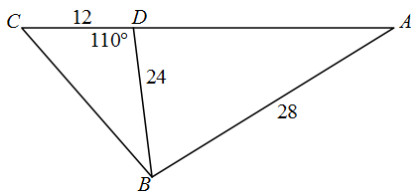
j) $\angle B =$

BA =

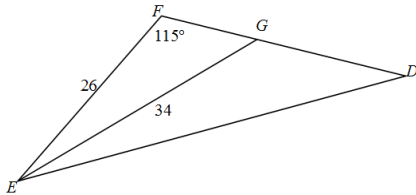


- Two hikers start out from the same place at 9:00am. The first hiker walks at 4km/h and the second hiker walks at 5km/h. If the angle between the two hikers is 70° then, to 3 decimal places, how far apart are the hikers at 11:30am?
- Triangle $\triangle ABC$ has sides of length 7, 12, and 15cm. To the nearest degree, what is the measure of the largest angle of the triangle?

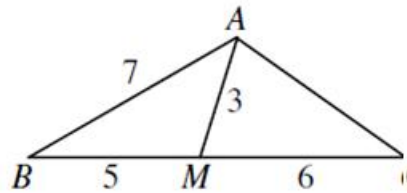
4. Find the measure of angle "A"



5. Given that line GE bisects angle "E", find the length of ED



6. In $\triangle ABC$, M is a point on BC such that $BM = 5$ and $MC = 6$. If $AM = 3$ and $AB = 7$, determine the exact value of AC .



7. In the diagram, $AC = 2x$, $BC = 2x + 1$ and $\angle ACB = 30^\circ$. If the area of $\triangle ABC$ is 18, what is the value of x ?

