PreCalculus **Name**_____

Notes: 6.2 Law of Cosines **Date**_____**Block**_____

The Law of Cosines can be used to solve a triangle when you're given:

_____

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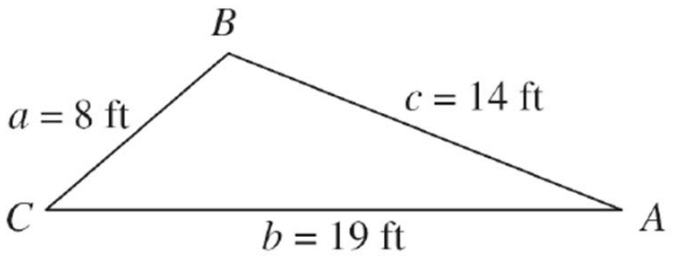
Formula:

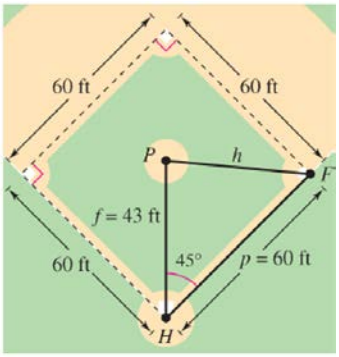
1. Use the Law of Cosines to solve each triangle.



2. $A = 115°$
$b = 15$ cm
$c = 10$ cm

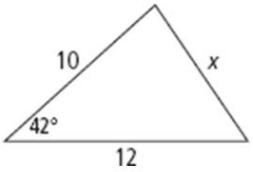
3. $a = 4$ cm
   $b = 8$ cm
   $c = 10$ cm

4. The pitcher's mound on a women's softball field is 43 feet from home plate and the distance between the bases is 60 feet. (The pitcher's mound is not halfway between home plate and second base.) How far is the pitcher's mound from first base?



For each triangle shown below, determine whether you would use the Law of Sines or Law of Cosines to find the value of x. Then find the value of x to the nearest hundredth.

5.



6.