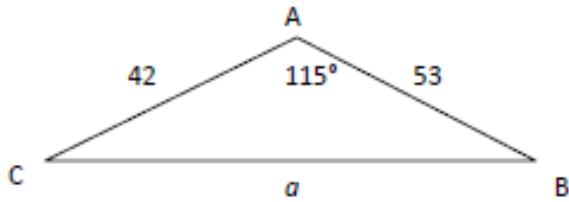


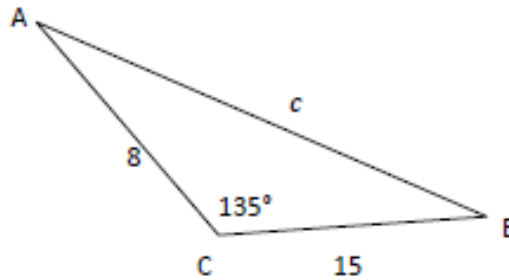
Unit 2 Day 5 HW

II. Find the length of a side using Law of Cosines.

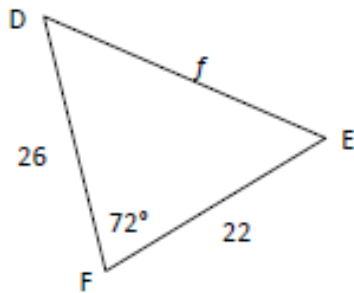
1. For  $\triangle ABC$  find  $a$  to the nearest hundredth.



2. For  $\triangle ABC$  find  $c$  to the nearest hundredth.



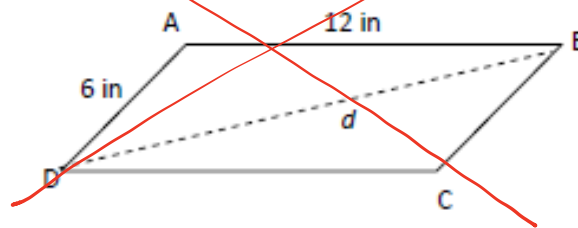
3. For  $\triangle DEF$  find  $f$  to the nearest hundredth.



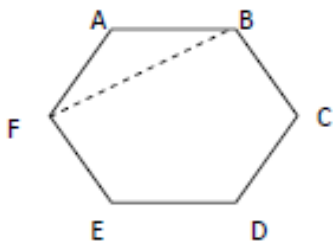
4. For  $\triangle ABC$  find the length of  $a$  to the nearest hundredth, given  $b = 8$ ,  $c = 23$ , and  $m\angle A = 29^\circ$ .

5. For  $\triangle ABC$  find the length of  $c$  to the nearest hundredth, given  $a = 54$ ,  $b = 47$ , and  $m\angle C = 85^\circ$ .

6. Find the length of the diagonal,  $d$ , of the parallelogram below to the nearest inch.

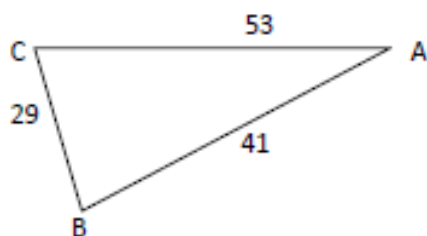


7. A regular hexagon has side lengths of 15 centimeters and angles that measure  $120^\circ$ . Find FB to the nearest centimeter.

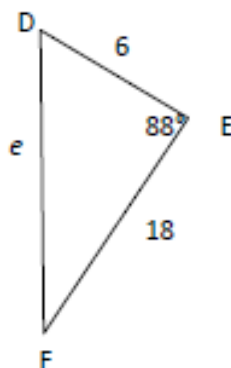


#### IV. Using Law of Cosines.

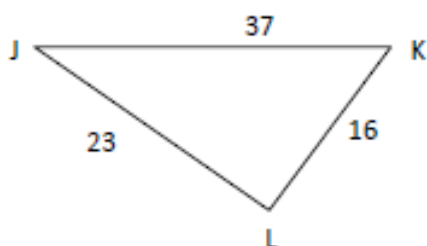
15. For  $\triangle ABC$  find  $m\angle B$  to the nearest tenth of a degree.



16. For  $\triangle DEF$  find  $e$  to the nearest hundredth.



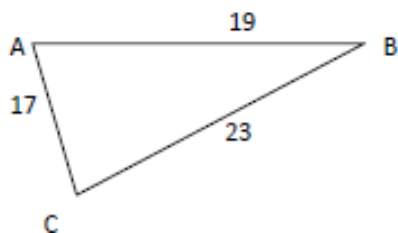
17. For  $\triangle JKL$  find  $m\angle K$  to the nearest tenth of a degree.



18. For  $\triangle XYZ$  find the length of  $z$  to the nearest hundredth, given  $x = 81$ ,  $y = 75$ , and  $m\angle Z = 42^\circ$ .

#### III. Find the measure of an angle using Law of Cosines.

8. For  $\triangle ABC$  find  $m\angle A$  to the nearest tenth of a degree.



9. For  $\triangle ABC$  find  $m\angle B$  to the nearest tenth of a degree.

