

Name _____

Date _____

Law of Cosines - Independent Practice Worksheet

Complete all the problems.

1. In a rhombus whose side measures 14 and the smaller angle is 80° ; find the length of the larger diagonal, to the nearest tenth.
2. In $\triangle PQR$, side $p = 12$, side $r = 6$ and $m\angle Q = 92^\circ$. Find side 'q' to the nearest integer.
3. In a rhombus whose side measures 24 and the smaller angle is 47° ; find the length of the larger diagonal, to the nearest tenth.
4. In $\triangle EFG$, side $e = 9$, side $g = 18$ and $m\angle F = 45^\circ$. Find side 'f' to the nearest integer.
5. In a rhombus whose side measures 6 and the smaller angle is 145° ; find the length of the larger diagonal, to the nearest tenth.
6. In $\triangle ABC$, side $a = 3$, side $b = 15$ and $m\angle C = 108^\circ$. Find side 'c' to the nearest integer.
7. In a rhombus whose side measures 4 and the smaller angle is 64° ; find the length of the larger diagonal, to the nearest tenth.
8. In $\triangle XYZ$, side $y = 21$, side $z = 4$ and $m\angle X = 80^\circ$. Find side 'x' to the nearest integer.
9. In a rhombus whose side measures 10 and the smaller angle is 72° ; find the length of the larger diagonal, to the nearest tenth.
10. In $\triangle FTP$, side $t = 5$, side $p = 7$ and $m\angle F = 175^\circ$. Find side 'f' to the nearest integer.

