

Name \_\_\_\_\_

Date \_\_\_\_\_

## Application of the Standard Law of Sines - Independent Practice Worksheet

Complete all the problems.



1. In  $\triangle ABC$ ,  $\sin A = 77$ ,  $\sin C = 23$  and  $c = 16$ . Find the length of  $A$ .
2. In  $\triangle PQR$ , side  $Q = 25$ ,  $m \angle P = 13^\circ$  and  $m \angle Q = 70^\circ$ . Find side  $P$  to the nearest tenth of an integer.
3. In  $\triangle XYZ$ , side  $Y = 18$ ,  $m \angle Y = 39^\circ$  and  $m \angle Z = 51^\circ$ . Find side  $Z$  to the nearest tenth of an integer.
4. In  $\triangle ABC$ ,  $\sin A = 82$ ,  $\sin B = 58$  and  $b = 27$ . Find the length of  $A$ .
5. In  $\triangle FTP$ ,  $\sin T = 29$ ,  $\sin P = 110$  and  $t = 9$ . Find the length of  $P$ .
6. In  $\triangle EFG$ , side  $E = 22$ ,  $m \angle E = 81^\circ$  and  $m \angle G = 26^\circ$ . Find side  $G$  to the nearest tenth of an integer.
7. In  $\triangle XYZ$ , side  $Z = 8$ ,  $m \angle Y = 15^\circ$  and  $m \angle Z = 94^\circ$ . Find side  $Y$  to the nearest tenth of an integer.
8. In  $\triangle PQR$ ,  $\sin P = 64$ ,  $\sin R = 35$  and  $r = 21$ . Find the length of  $P$ .
9. In  $\triangle FTP$ , side  $f = 24$ ,  $m \angle F = 17^\circ$  and  $m \angle P = 72^\circ$ . Find side  $p$  to the nearest tenth of an integer.
10. In  $\triangle ABC$ ,  $\sin A = 88$ ,  $\sin B = 42$ , and  $a = 17$ . Find the length of  $b$ .

