Trigonometry Worksheet
The Law of Sines

Practice Questions:

For each of the following given information, determine if there are one, two solution(s), or no solution. Draw the triangle(s), if possible, including the unknown measurements.

1. $\Delta ABC$, angle $A = 30^\circ$, angle $B = 80^\circ$, side $c = 20$ cm.
2. $\Delta EFG$, angle $A = 20^\circ$, angle $B = 120^\circ$, side $c = 28.0$ km.
3. $\Delta RST$, angle $R = 42^\circ$, side $r = 60$ m, side $t = 100$ m.
4. $\Delta ABC$, side $a = 10$ cm, side $b = 18$ cm, side $c = 30$ cm.
5. $\Delta MNP$, angle $M = 90^\circ$, side $m = 26$ ft, $n = 11$ ft.
6. $\Delta HKJ$, angle $H = 60^\circ$, side $h = 26$ ft, $k = 11$ ft.

Formula: \[
\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}
\]

OR, \[
\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}
\]