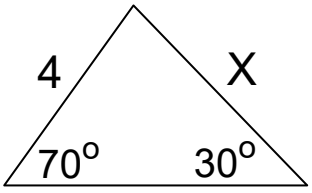
Math on the Fly!

NAME: _____ DATE: _____

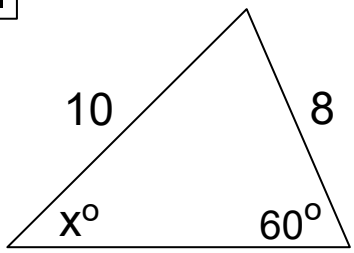
The Law of Sines

Find the missing side or angle in each problem.

1.



2.



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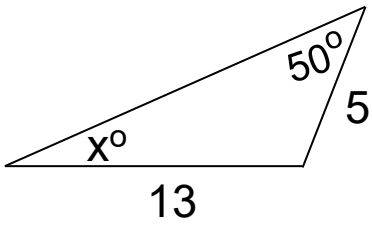

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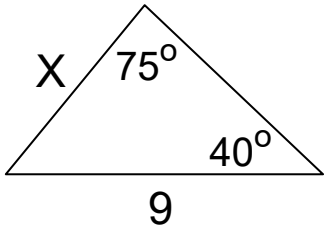

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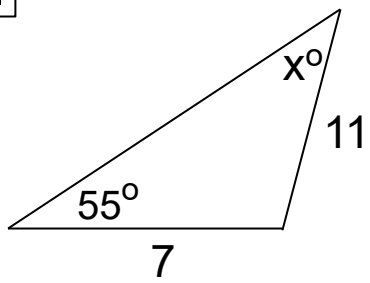

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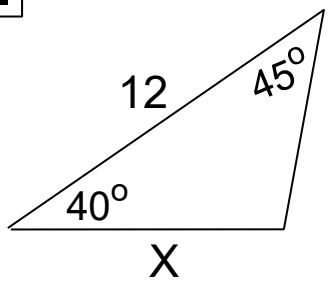

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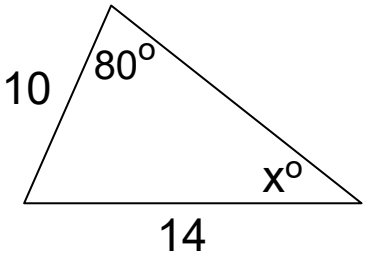

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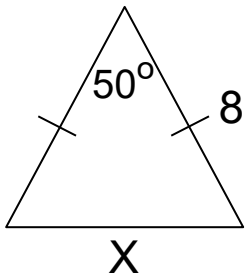
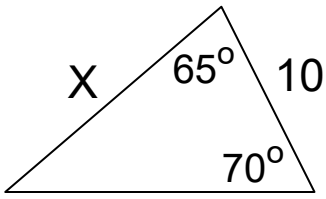


9.



SOLUTIONS

1. $x = \frac{4\sin 70^\circ}{\sin 30^\circ} \approx 7.52$

2. $\angle x = \sin^{-1}\left(\frac{8\sin 60^\circ}{10}\right) \approx 43.9^\circ$

3. $\angle x = \sin^{-1}\left(\frac{5\sin 50^\circ}{13}\right) \approx 17.1^\circ$

4. $x = \frac{9\sin 40^\circ}{\sin 75^\circ} \approx 5.99$

5. $\angle x = \sin^{-1}\left(\frac{7\sin 55^\circ}{11}\right) \approx 31.4^\circ$

6. $x = \frac{12\sin 45^\circ}{\sin 95^\circ} \approx 8.52$

7. $\angle x = \sin^{-1}\left(\frac{10\sin 80^\circ}{14}\right) \approx 44.7^\circ$

8. $x = \frac{8\sin 50^\circ}{\sin 65^\circ} \approx 6.76$

9. $x = \frac{10\sin 70^\circ}{\sin 45^\circ} \approx 13.29$