

Laws of sines and cosines — Use the law of sines

Name: _____

Date: _____



Use the law of sines. Round each length to one decimal place.

1 In $\triangle ABC$, $a = 7$, $\angle A = 50^\circ$, $\angle B = 60^\circ$.

Find b : _____

2 In $\triangle ABC$, $a = 12$, $\angle A = 40^\circ$, $\angle B = 50^\circ$.

Find b : _____

3 In $\triangle ABC$, $a = 9$, $\angle A = 45^\circ$, $\angle B = 55^\circ$.

Find b : _____

4 In $\triangle ABC$, $a = 9$, $\angle A = 65^\circ$, $\angle B = 40^\circ$.

Find b : _____

5 In $\triangle ABC$, $a = 11$, $\angle A = 30^\circ$, $\angle B = 75^\circ$.

Find b : _____

6 In $\triangle ABC$, $a = 8$, $\angle A = 35^\circ$, $\angle B = 80^\circ$.

Find b : _____

7 In $\triangle ABC$, $a = 10$, $\angle A = 50^\circ$, $\angle B = 70^\circ$.

Find b : _____

8 In $\triangle ABC$, $a = 6$, $\angle A = 60^\circ$, $\angle B = 45^\circ$.

Find b : _____



Laws of sines and cosines · Use the law of sines — Answer key



1. In $\triangle ABC$, $a = 7$, $\angle A = 50^\circ$, $\angle B = 60^\circ$. Find b : 7.9

2. In $\triangle ABC$, $a = 12$, $\angle A = 40^\circ$, $\angle B = 50^\circ$. Find b : 14.3

3. In $\triangle ABC$, $a = 9$, $\angle A = 45^\circ$, $\angle B = 55^\circ$. Find b : 10.4

4. In $\triangle ABC$, $a = 9$, $\angle A = 65^\circ$, $\angle B = 40^\circ$. Find b : 6.4

5. In $\triangle ABC$, $a = 11$, $\angle A = 30^\circ$, $\angle B = 75^\circ$. Find b : 21.3

6. In $\triangle ABC$, $a = 8$, $\angle A = 35^\circ$, $\angle B = 80^\circ$. Find b : 13.7

7. In $\triangle ABC$, $a = 10$, $\angle A = 50^\circ$, $\angle B = 70^\circ$. Find b : 12.3

8. In $\triangle ABC$, $a = 6$, $\angle A = 60^\circ$, $\angle B = 45^\circ$. Find b : 4.9