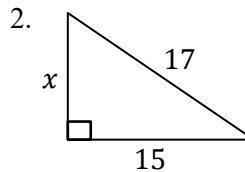
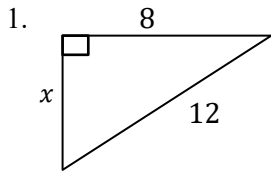


Math 2 Unit 7 Review Worksheet

Name: _____

Date: _____ **Per:** _____

[1-2] Find the value of x . Show all work and leave answers in simplified radical form.



1. _____

2. _____

3. The lengths of the two legs of a right triangle are $2\sqrt{3}$ and 5. What is the length of the hypotenuse?

3. _____

[4-5] State whether a triangle formed with the given side lengths is a right triangle. Show all work.

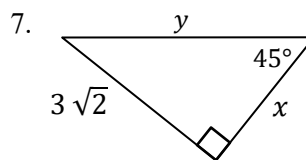
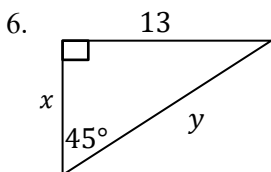
4. 8, 17, 15

5. 4, 10, 12

4. _____

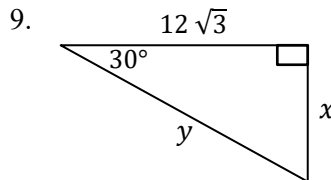
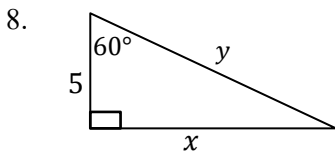
5. _____

[6-9] Find the missing lengths. Show all work and leave answers in simplified radical form.



6. _____

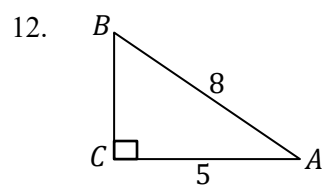
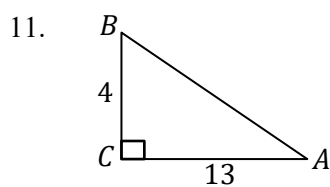
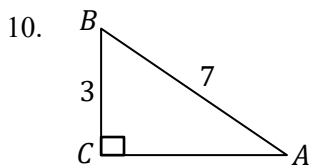
7. _____



8. _____

9. _____

[10-12] Find the measure of $\angle A$ to the nearest degree.

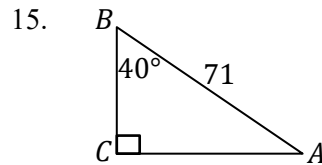
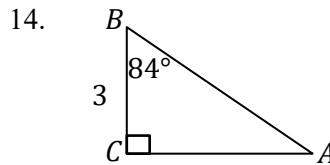
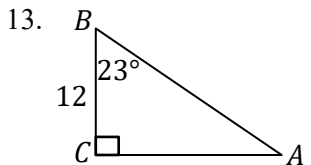


10. _____

11. _____

12. _____

[13-15] Find the length of AC rounded to the nearest tenth.



13. _____

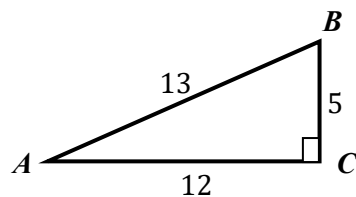
14. _____

15. _____

[16-21] Set up each of the equations without solving and give the letter answer(s).

16. Determine which of **all** the following equations are true.

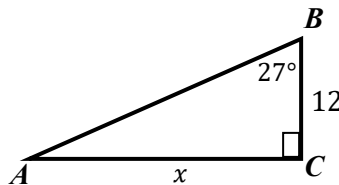
- A. $\sin A = \frac{13}{5}$
- B. $\sin B = \frac{12}{13}$
- C. $\cos A = \frac{5}{13}$
- D. $\cos B = \frac{5}{13}$



16. _____

17. Which equation could be used to find x in $\triangle ABC$?

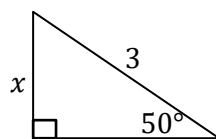
- A. $x = \frac{12}{\sin 27^\circ}$
- B. $x = 12 \cos 27^\circ$
- C. $x = 12 \tan 27^\circ$
- D. None of These



17. _____

18. Which expression can be used to find the value of x ?

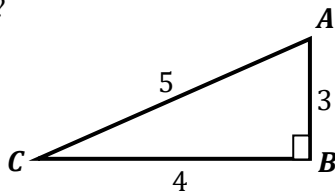
- A. $x = \frac{\sin 50^\circ}{3}$
- B. $x = \frac{3}{\sin 50^\circ}$
- C. $x = \sin 150^\circ$
- D. $x = 3 \sin 50^\circ$



18. _____

19. Which of the following equals $\sin A$?

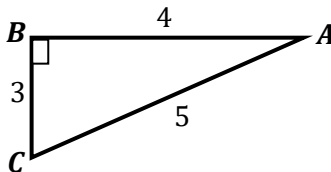
- A. $\sin C$
- B. $\cos A$
- C. $\cos C$
- D. $\tan A$



19. _____

20. Which of the following equals $\sin A$?

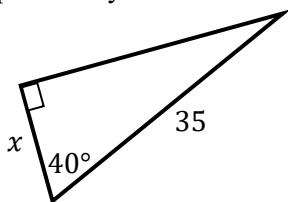
- A. $\tan A$
- B. $\sin C$
- C. $\cos C$
- D. $\cos A$



20. _____

21. Identify all equation(s) that are set up correctly to find x .

- A. $\cos 40^\circ = \frac{x}{35}$
- B. $\tan 40^\circ = \frac{x}{35}$
- C. $\cos 50^\circ = \frac{x}{35}$
- D. $\sin 50^\circ = \frac{x}{35}$
- E. $\sin 40^\circ = \frac{x}{35}$



21. _____

[22-25] Use the given information to draw a diagram and find the requested information.

22. A television screen measures approximately 15.5 inches high and 19.5 inches wide. A television is advertised by giving the approximate length of the diagonal of its screen. How should this television be advertised?

22. _____

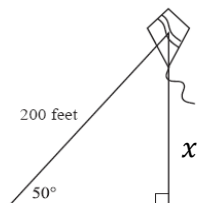
23. A tree casts a shadow that is 22 m long at a certain time of day. The angle of elevation to the sun from the tip of the shadow is 47° . What is the height of the tree?

23. _____

24. A ladder 20 feet long is leaning against the side of a building. If the angle formed between the ladder and the ground is 75° , how far is the bottom of the ladder from the base of the building?

24. _____

25.



25. _____