5.2

Name _____ Date _____ Period _____

Right Triangle Trigonometry

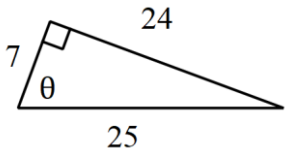
Simplify.

1. $\frac{2}{\sqrt{5}}$

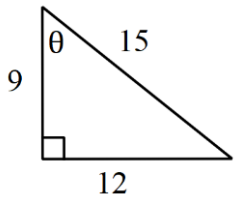
2. $\frac{3\sqrt{2}}{\sqrt{7}}$

Find the value of the trig function indicated. Leave as a ratio in simplest form.

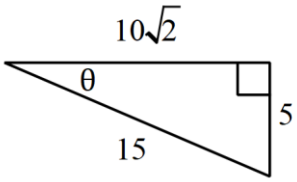
3. $\tan\theta$



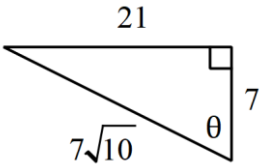
4. $\sin\theta$



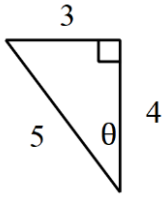
5. $\sec\theta$



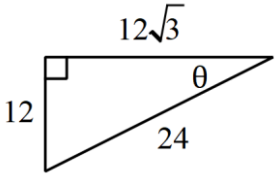
6. $\cos\theta$



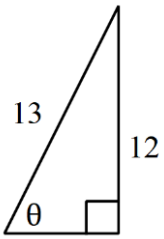
7. $\csc\theta$



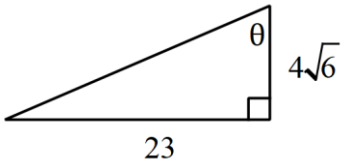
8. $\cot\theta$



9. $\cos\theta$



10. $\sin\theta$



Find the value of each. Round you answers to the nearest ten-thousandth (4 decimal places).

11. $\cos 43°$

12. $\tan 56°$

13. $\sin 65°$

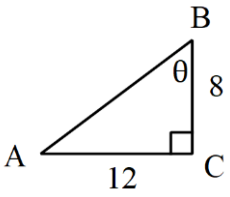
14. $\cot 80°$

15. $\sec 30°$

16. $\csc 70°$

Find the measure of each angle indicated. Round to the nearest tenth.

17.



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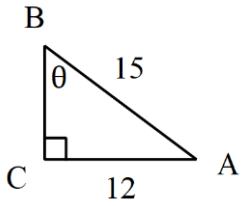

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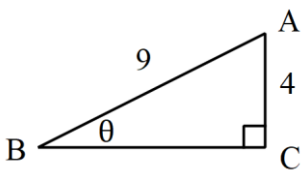

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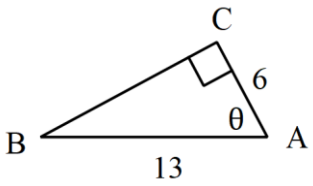
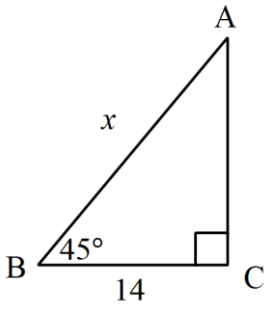


Find the measure of each side indicated. Round to the nearest tenth.

21.



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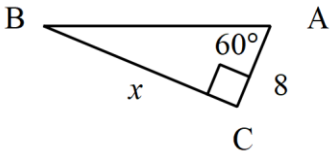

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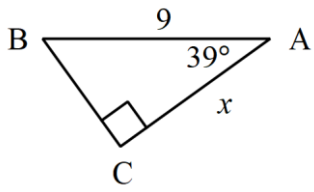

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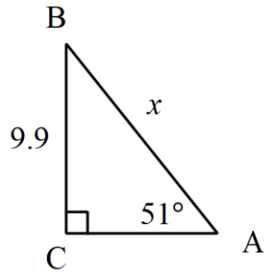
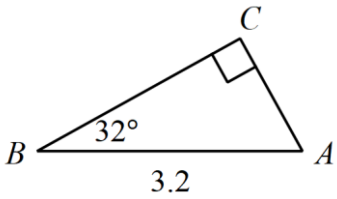


Solve each triangle. Round answers to the nearest tenth.

25.

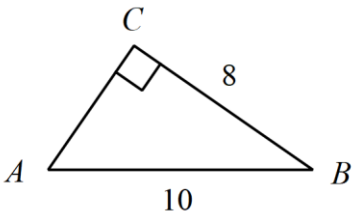


$m\angle A =$ _____ $a =$ _____

$m\angle B =$ _____ $b =$ _____

$m\angle C =$ _____ $c =$ _____

26.

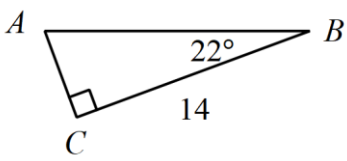


$m\angle A =$ _____ $a =$ _____

$m\angle B =$ _____ $b =$ _____

$m\angle C =$ _____ $c =$ _____

27.

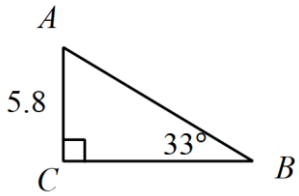


$m\angle A =$ _____ $a =$ _____

$m\angle B =$ _____ $b =$ _____

$m\angle C =$ _____ $c =$ _____

28.



$m\angle A =$ _____ $a =$ _____

$m\angle B =$ _____ $b =$ _____

$m\angle C =$ _____ $c =$ _____

Factor each completely.

29. $k^2 + k - 6$

30. $3n^2 + 17n + 20$