

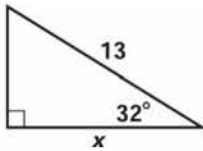
Worksheet 1

Identifying the trig ratio and setting up the equation

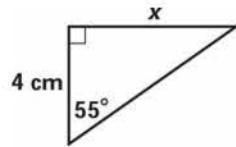
Part I: Look at the given information and the variable in each triangle below. Determine which trig ratio applies to the given information.

Part II: After completing part I, go back to every triangle and write an equation with the given information.

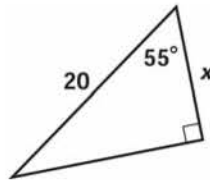
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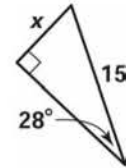
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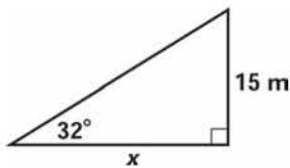
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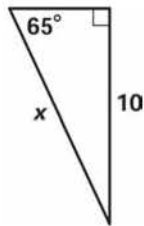
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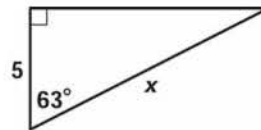
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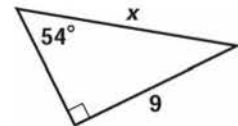
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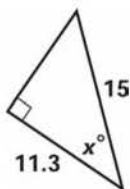
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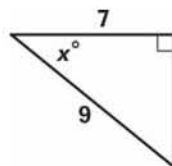
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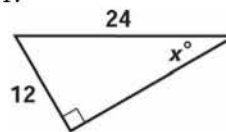
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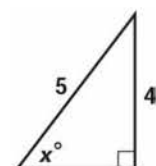
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11.



12.



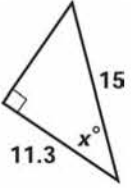
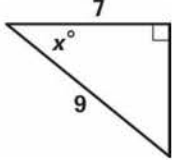
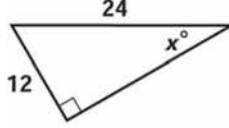
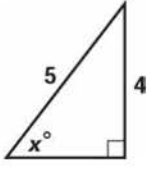
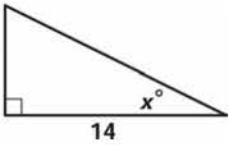
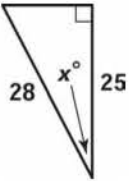
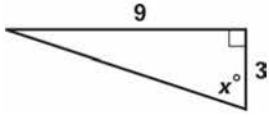
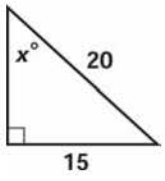
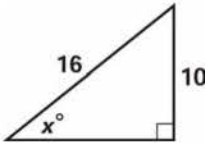
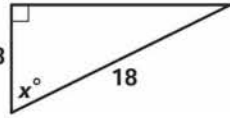
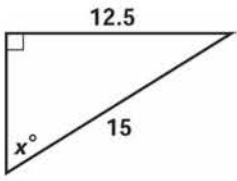
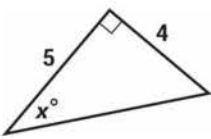
Worksheet 2

Using inverse trig ratios to solve for an angle in a right triangle

Part I: Use your calculator and inverse trig functions to find the angle for each ratio below to the nearest tenth (round to 1 decimal place).

- | | | |
|--------------------------------------|--------------------------------------|---------------------------------------|
| 1. $\sin^{-1} .86 =$ _____ | 5. $\cos^{-1} .72 =$ _____ | 9. $\tan^{-1} .53 =$ _____ |
| 2. $\sin^{-1} \frac{5}{8} =$ _____ | 6. $\cos^{-1} \frac{1}{8} =$ _____ | 10. $\tan^{-1} 2 =$ _____ |
| 3. $\sin^{-1} .5 =$ _____ | 7. $\cos^{-1} .3 =$ _____ | 11. $\tan^{-1} 4.6 =$ _____ |
| 4. $\sin x = \frac{3}{4}, x =$ _____ | 8. $\cos x = \frac{1}{2}, x =$ _____ | 12. $\tan x = \frac{7}{8}, x =$ _____ |

Part II: Solve for x in each triangle below. Use what you learned in lesson 3 to first identify the ratio, then write the equation, and then solve the equation. Make sure your calculator is in degree mode. Round your answers to the nearest tenth.

- | | | | |
|--|---|--|---|
| 1.  | 2.  | 3.  | 4.  |
| 5.  | 6.  | 7.  | 8.  |
| 9.  | 10.  | 11.  | 12.  |