

Name _____ Date _____ Class _____

Lesson 4 Worksheet 2

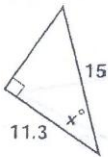
Using inverse trig ratios to solve for an angle in a right triangle

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).

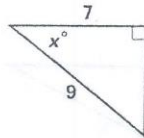
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|---|---|--|
| 1. $\sin^{-1} .86 =$ _____ | 5. $\cos^{-1} .72 =$ _____ | 9. $\tan^{-1} .53 =$ _____ |
| 2. $\sin^{-1} \frac{5}{8} =$ _____ | 6. $\cos^{-1} \frac{1}{8} =$ _____ | 10. $\tan^{-1} 2 =$ _____ |
| 3. $\sin^{-1} .5 =$ _____ | 7. $\cos^{-1}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

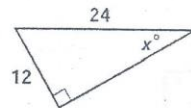
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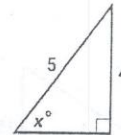
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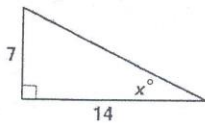
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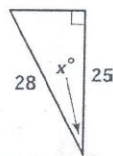
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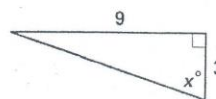
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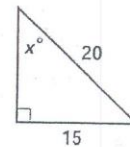
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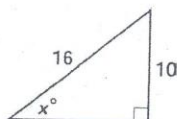
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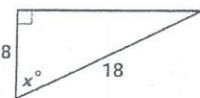
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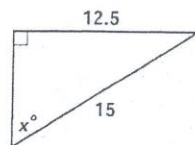
9.



10.



11.



12.

