

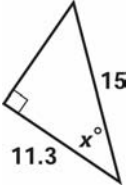
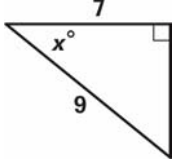
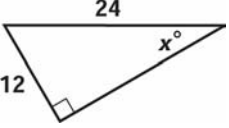
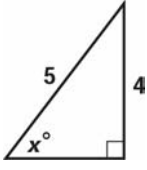
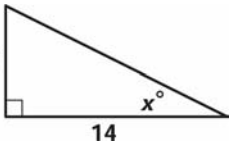
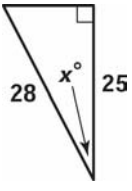
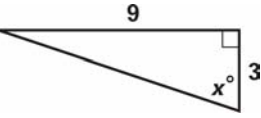
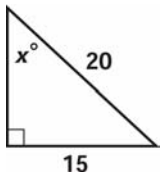
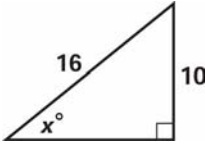
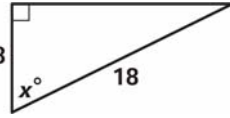
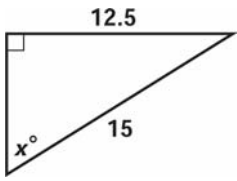
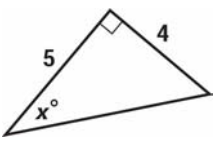
## Lesson 4 Worksheet 2

### 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).

- |                                      |                                      |                                       |
|--------------------------------------|--------------------------------------|---------------------------------------|
| 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.  |