U2D3          **Determining Measures of Angles in Right Triangles**

Trig ratios can also be used to find the measures of angles of a right triangle that are not known.
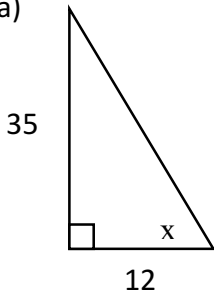
Examples: For the following triangles, identify the trig ratio to use, write the equation and solve it to one decimal place using the INVERSE TRIG buttons on your calculator.
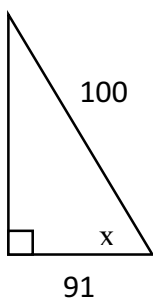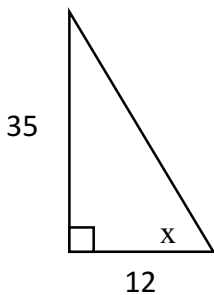
| $\sin^{-1}$ | $\cos^{-1}$ | $\tan^{-1}$ |

a)

35

12

x

Have:

Need:

Use:

b)

100

91

x

Have:

Need:

Use:

c)

35

12

x

Have:

Need:

Use:

Ex. 2   Solve Δ XYZ given that $\angle X = 90°, \ x = 8.2\,cm, \ z = 6.0\,cm.$

**To solve means** _____

Y

Z          X

U2D3 Practice:  Pg. 80 # 5, 6, 7, 11, 13     ✓ Answers Pg. 540  2.1