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| **CASE 1: UNKNOWN ANGLE** | **CASE 2: UNKNOWN SIDE** |
| Determine the value of angle x to the nearest angle. | In ∆JKL find the length of x to one decimal place the |

**PRACTICE CASE 1: Finding an Angle Using Trig Ratios**

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| **Ex1:** Determine the value of angle x to the nearest angle.  4 cm  5 cm  H  **x** | **Ex2:** Determine the value of angle x to the nearest angle. |

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| **Example 3:**  A ladder leans against a building.  The foot of the ladder is 6 feet from the building.  The ladder reaches height of 14 feet on the building.Determine to the nearest degree, the angle the ladder makes with the ground.  ladderpic | **Example 4:**  A boat sails from port North for 2.8 km, then west for 4km What is the bearing back to port now?  **Bearing**: Clockwise angle from NORTH.  http://mathematics.nayland.school.nz/Year_10/y10_Triangles/Images/poster_images/Y10_Tr38.jpg |

**PRACTICE CASE 2: Finding a Side Length**

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| **Ex1** In ∆JKL find the length of x to one decimal place.  300  J  K  L  20 m  x | **Ex2** In ∆ABC find the length of x to one decimal place.  B  A  C  600  x  3.6 m | **Ex3** In ∆JKL find the length of x to one decimal place.  650  32 m  x |