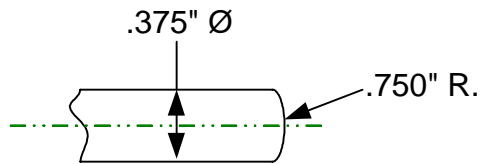
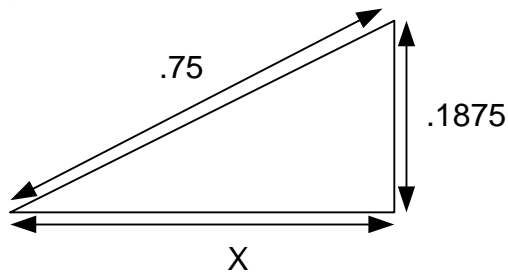


# OmniTurn Programming Example

To find beginning and end point of .750 R for machining arc on end of part:



1. Draw reference right triangle using hypotenuse (longest leg) as radius size. Use 1/2 of part diameter as vertical leg.



2. Solve for X. Use  $.75^2 - .1875^2 = X^2$   
 $.5625 - .03516 = X^2$   
 $.52734 = X^2$   
 $.72618 = X$

3. Using value found for X, subtract X from radius size to determine distance travelled in Z-axis from start to end of radius

$$.75 - .72618 = .02382$$

4. Program sequence for a sharp cornered tool would be:

```
X0Z0  
G02X.375Z-.02382R.75
```

or

```
X.375Z-.02382  
G03X0Z0R.75
```