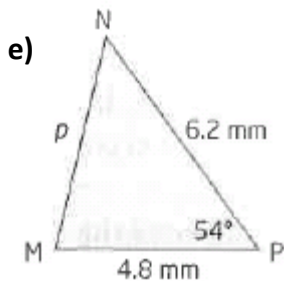
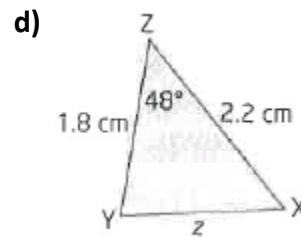
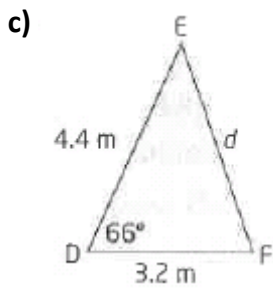
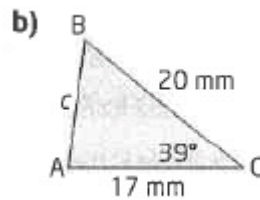
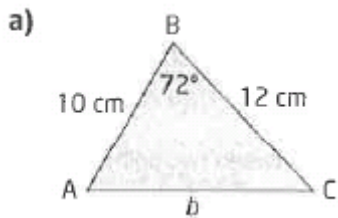


8.2 Cosine Law Homework

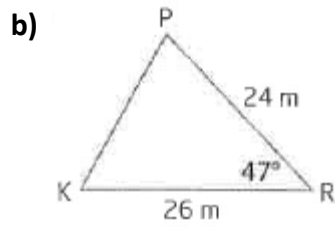
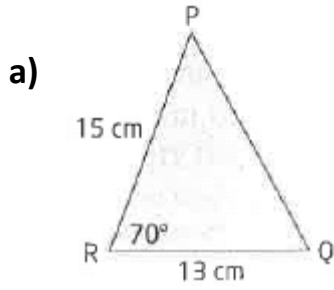
1. Find the length of the indicated side for each triangle to the nearest tenth



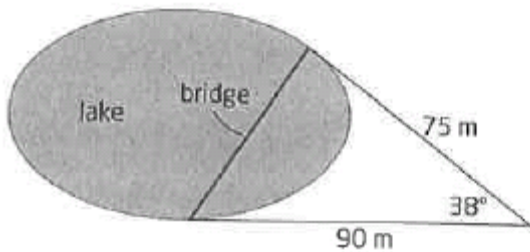
f) Sketch the following triangle and then find the missing side length:

In acute $\triangle TUV$, $t = 1.8$ cm, $v = 1.4$ cm, and $\angle U = 52^\circ$.

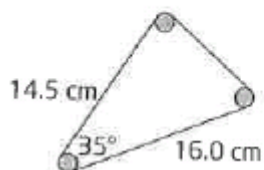
2. Solve Each Triangle (round to the nearest whole number)



3. Find the length of the bridge, to the nearest metre.



4. A drive belt wraps around three pulleys, as shown.



Find the perimeter of the drive belt to the nearest tenth of a cm:

Answers:

1) a) 13.0 cm b) 12.7 mm c) 4.3m d) 1.7cm e) 5.1mm f) $u=1.4\text{cm}$

2) a) $r=16\text{ cm}$ $P=48$ $Q=62$ (depending on which angle you solve for first, there will be some variation in your answer because of rounding)

b) $r=20\text{m}$ $P=72$ $K=61$

3) 56m

4) 39.8cm