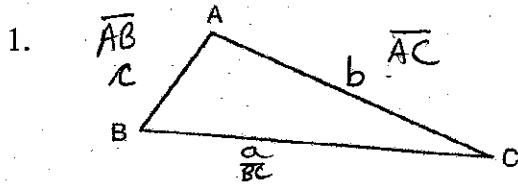


2.0 - Naming Triangles and Pythagoras WORKSHEET

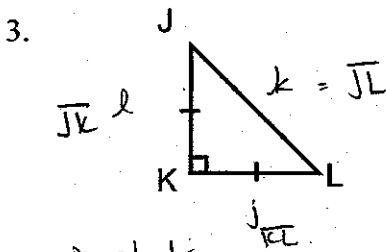
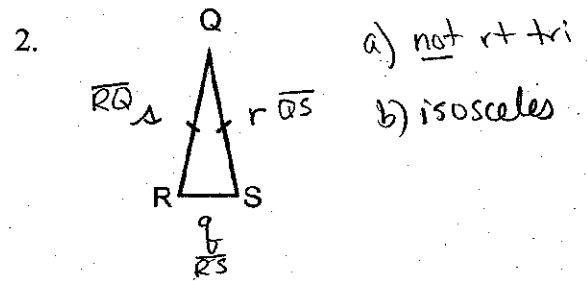
Name: *Key*
Date:

Labelling Triangles

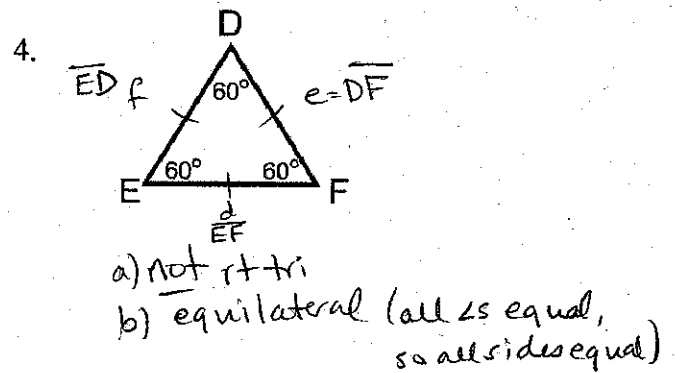
- State: right Triangle OR not a right triangle
- State: equilateral, isosceles, or scalene
- Label the sides using lower case letters
- Label the sides using their endpoints



- Not rt triangle
- scalene

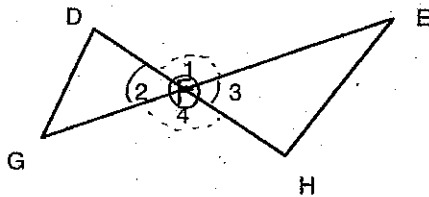


- rt tri
- isosceles



Labelling Angles

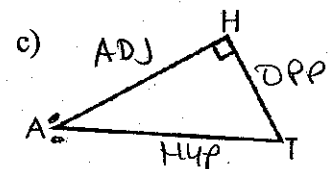
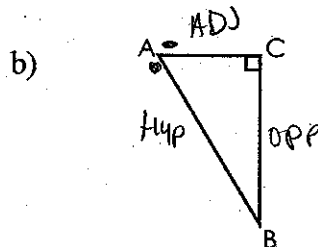
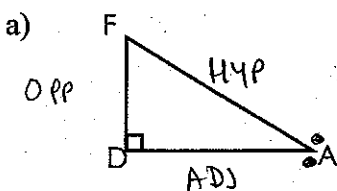
5. If DH and EG intersect at F, name the four angles formed (using the three point system)



$$\begin{aligned} \angle 1 &= \angle DFE & \angle 2 &= \angle DFG \\ \angle 3 &= \angle EFH & \angle 4 &= \angle GFH \end{aligned}$$

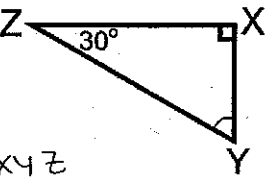
Labelling Angles from a Target Angle (for Right Triangles ONLY!!!) OPP, ADJ, HYP

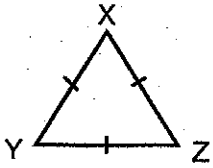
6. Label the HYPotenuse, the side OPPosite to angle A and the side ADJacent to angle A (use A as the target angle).

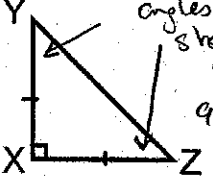


Finding Angles

7. In each triangle, find the measure of angle XYZ

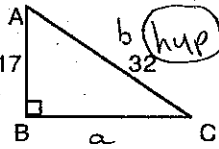
a) 
 $\angle XYZ$
 $180^\circ - 90^\circ - 30^\circ = 60^\circ$

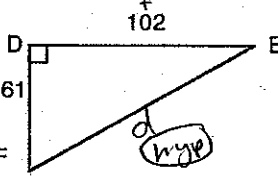
b) 
 equal sides \rightarrow equal angles
 $180^\circ \div 3 = 60^\circ$
 $\angle XYZ = 60^\circ$

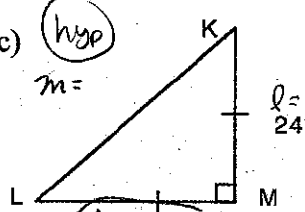
c) 
 $180^\circ - 90^\circ = 90^\circ$
 2 equal angles share 90°
 $90^\circ \div 2 = 45^\circ$
 $\angle XYZ = 45^\circ$

Pythagoras

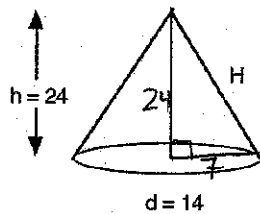
8. Name and find the missing sides (to the nearest hundredth).

a) 
 $a^2 + c^2 = b^2$
 $a^2 + 17^2 = 32^2$
 $a^2 = 32^2 - 17^2$
 $a^2 = 735$
 $a = 27.11$

b) 
 $e^2 + f^2 = d^2$
 $61^2 + 102^2 = d^2$
 $14125 = d^2$
 $d = 118.85$

c) 
 $l^2 + k^2 = m^2$
 $24^2 + 24^2 = m^2$
 $1152 = m^2$
 $m = 33.94$

9. Find H



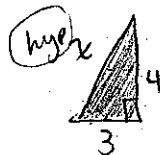
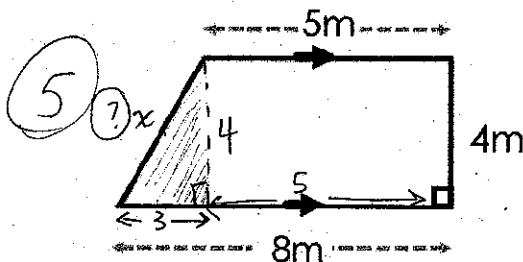
$$24^2 + 7^2 = H^2$$

$$625 = H^2$$

$$H = 25$$

10. Find the perimeter of this trapezoid (Note: \rightarrow means the lines are parallel.)

$P =$ add up all sides.



$$3^2 + 4^2 = x^2$$

$$9 + 16 = x^2$$

$$25 = x^2$$

$$x = 5$$

The perimeter of the trapezoid is 22m.

$$P = 5 + 5 + 4 + 8 = 22m$$