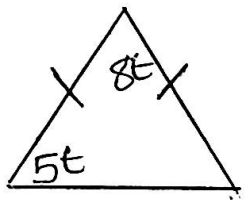
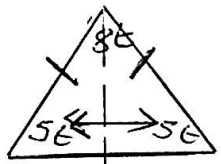
Content for Friday 15/5/2020

An Isosceles triangle

1 Calculate the value of the unknown angles



Solution



2 base angles are equal

$5t + 5t + 8t = 180°$

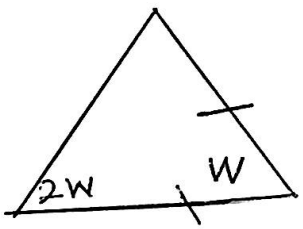
$10t + 8t = 180°$

$\frac{18t}{18} = \frac{180°}{18}$ (10)

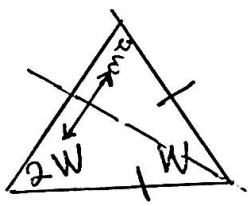
$t = 10°$

Note: In an Isosceles triangle, the two base angles are equal.

2



solution



The two bas angles of an Isosceles triangle are equal

$2W + 2W + W = 180°$

$4W + W = 180°$

$5W = 180°$

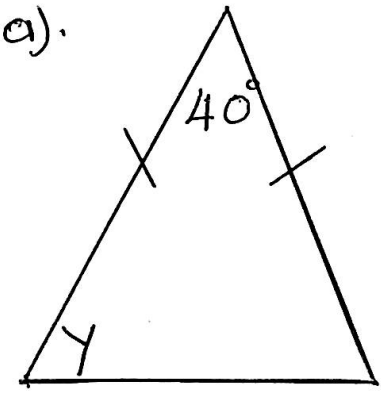
$\frac{5W}{5} = \frac{180°}{5}$

$W = 36°$

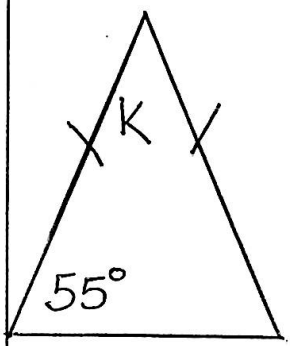
Activity for Friday 15/5/2020

Calculate the value of unknown angles

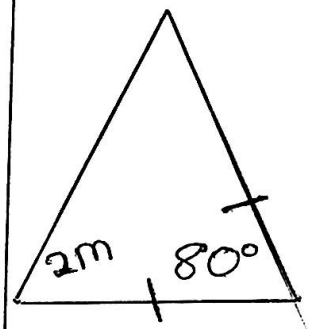
a).



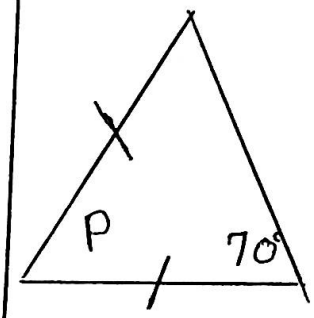
b



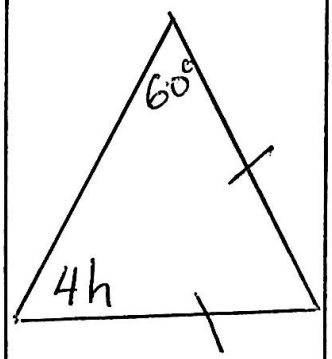
c).



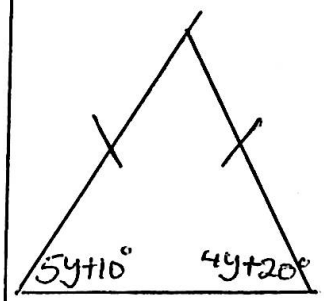
d).



e

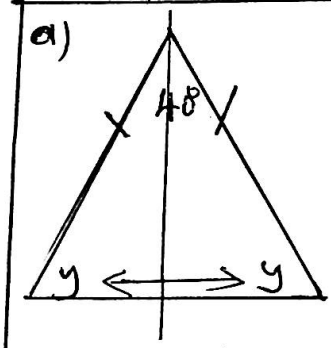


f



Answers for Friday 15/5/2020

a)



$y + y + 48^\circ = 180^\circ$

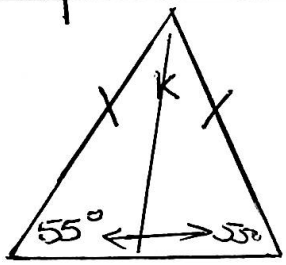
$2y + 48^\circ = 180^\circ$

$2y + 48^\circ - 48^\circ = 180^\circ - 48^\circ$

$\frac{2y}{2} = \frac{132^\circ}{2}$

$y = 66^\circ$

b



$55^\circ + 55^\circ + k = 180^\circ$

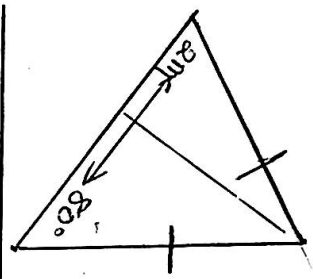
$110^\circ + k = 180^\circ$

$110^\circ - 110^\circ + k = 180^\circ - 110^\circ$

$0 + k = 70^\circ$

$k = 70^\circ$

c

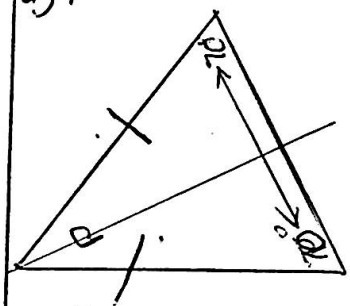


$2m = 80^\circ$

$\frac{2m}{2} = \frac{80^\circ}{2}$

$m = 40^\circ$

d).



$70^\circ + 70^\circ + P = 180^\circ$

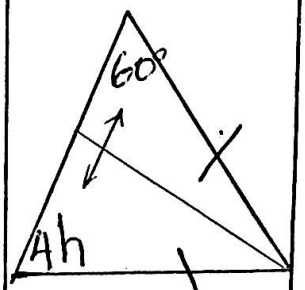
$140^\circ + P = 180^\circ$

$140^\circ - 140^\circ + P = 180^\circ - 140^\circ$

$0 + P = 40^\circ$

$P = 40^\circ$

e

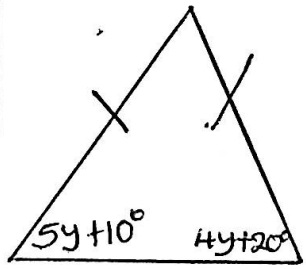


$4h = 60^\circ$

$\frac{4h}{4} = \frac{60^\circ}{4}$

$h = 15^\circ$

f



$5y + 10^\circ = 4y + 20^\circ$

$5y + 10^\circ - 10^\circ = 4y + 20^\circ - 10^\circ$

$5y + 0 = 4y + 10$

$5y = 4y + 10$

$5y - 4y = 4y - 4y + 10$

$y = 10^\circ$