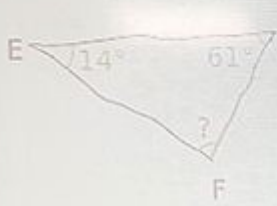


\* n°1

Dans chaque cas, calcule la mesure de l'angle demandé.

$$180 - (71 + 23) = 86$$

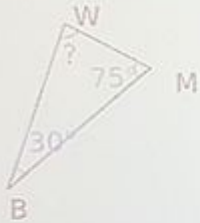
$$\widehat{SKI} = 86^\circ$$



$$14 + 61 = 75$$

$$180 - 75 = 105$$

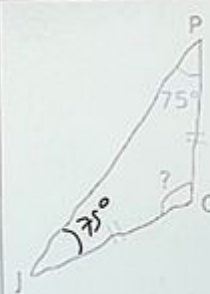
$$\widehat{EFH} = 105^\circ$$



$$75 + 30 = 105$$

$$180 - 105 = 75$$

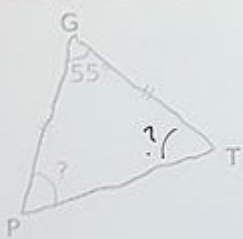
$$\widehat{BWM} = 75^\circ$$



$$75 + 75 = 150^\circ$$

$$180 - 150 = 30^\circ$$

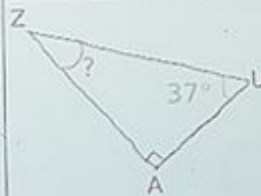
$$\widehat{JCP} = 30^\circ$$



$$\widehat{GPT} = 62,5^\circ$$

$$180 - 55 = 125^\circ$$

$$125 \div 2 = 62,5^\circ$$



$$37 + 90 = 127$$

$$180 - 127 = 53$$

$$\widehat{UZA} = 53^\circ$$

n°3

a. le triangle CDE est **isocèle** (cadage)  
le triangle CEF est **isocèle**.

b.  $\widehat{ECD} = 36^\circ$  (car triangle isocèle)

$$\widehat{EDC} = 108^\circ \quad 36 \times 2 = 72$$

$$180 - 72 = 108$$

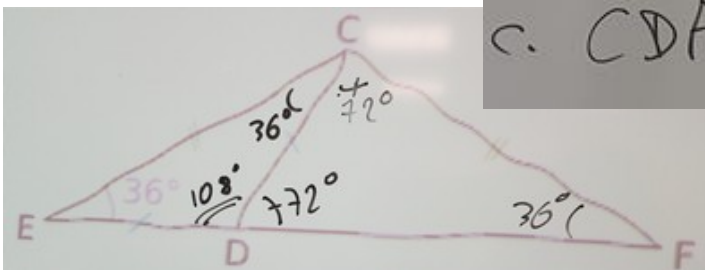
$$\widehat{CDF} = 72^\circ \quad 180 - 108 = 72 \text{ (angle plat)}$$

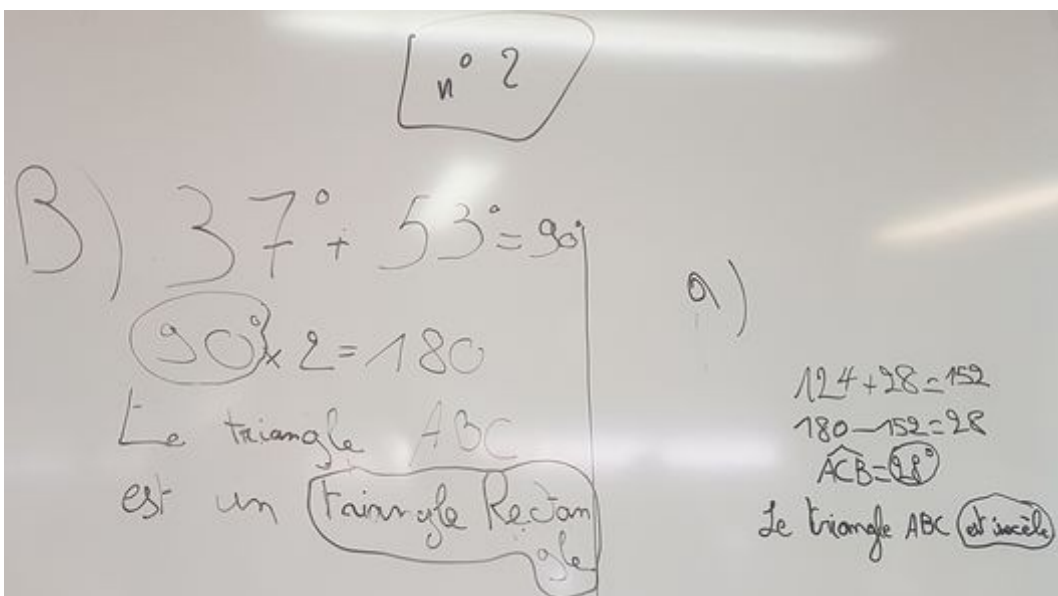
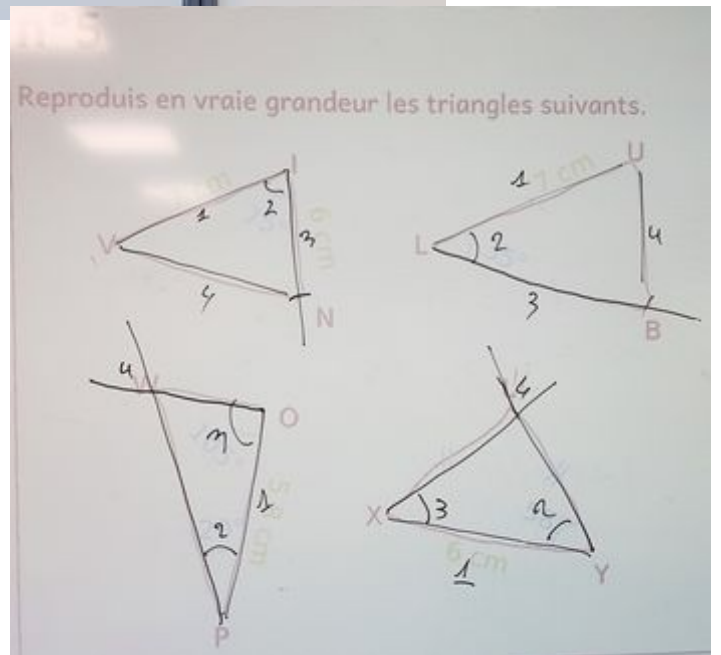
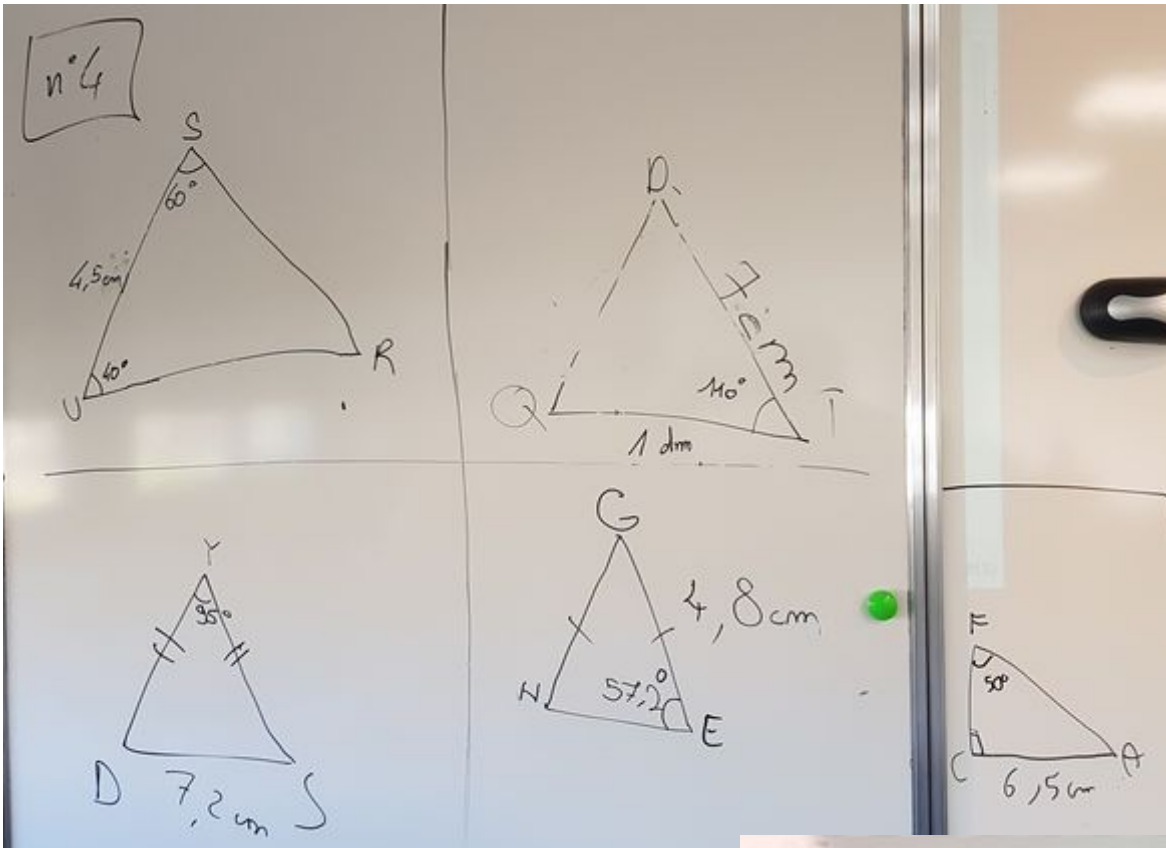
$$\widehat{DFC} = 36^\circ \text{ (CEF est isocèle)}$$

$$\widehat{DCF} = 72^\circ \quad 72^\circ + 36^\circ = 108^\circ$$

$$180 - 108 = 72^\circ$$

c. CDF est **isocèle** (2 angles égaux).





# Un angle

Calcule la mesure de l'angle  $\widehat{OEF}$ .

$$\widehat{OEF} = 32^\circ$$

$$74 + 74 = 148$$

$$180 - 148 = 32$$

$$180 - 3 = 60^\circ$$

$$54 + 80 = 144$$

$$180 - 144 = 36^\circ$$

$$180 - 48 = 132$$

$$132 \div 2 = 66^\circ$$

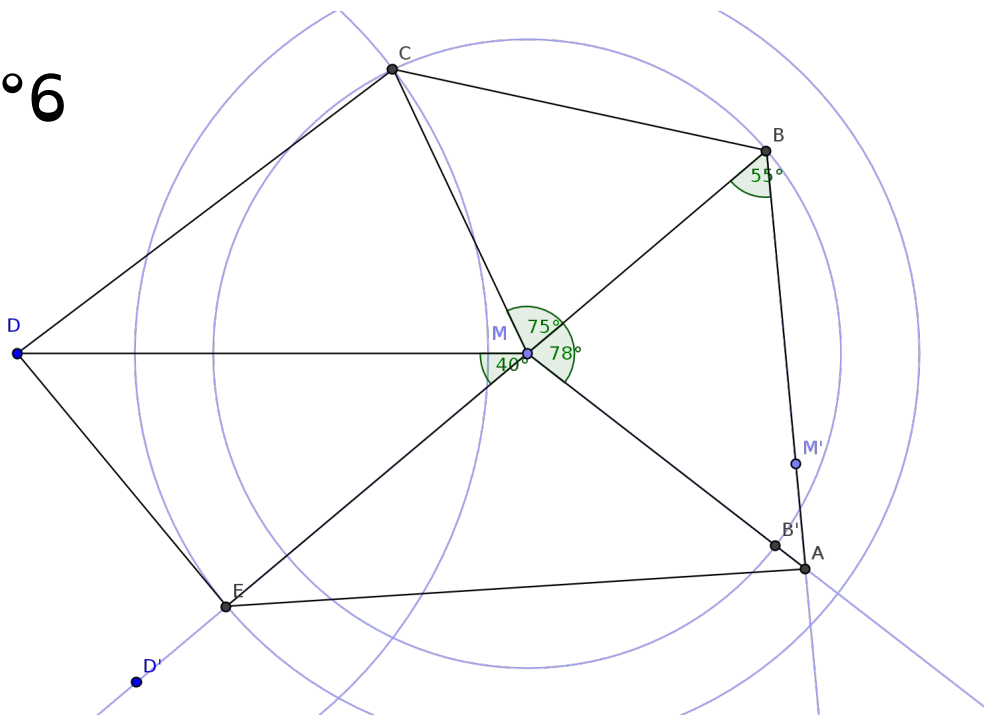
$$\widehat{AOF} = 180 - (60 + 60) = 60^\circ$$

$$90 + 43 = 133$$

$$180 - 133 = 47^\circ$$

$$360 - (77 + 60 + 36 + 46 + 47) = 74^\circ$$

n°6



La tasse en papier

## Mesures des angles

- $\widehat{ABC} = 90^\circ$  car le triangle  $ABC$  est rectangle en  $B$
- $\widehat{BAC} = (180^\circ - 90^\circ) \div 2 = 45^\circ$  (la somme des angles d'un triangle est  $180^\circ$ )
- $\widehat{BDA'} = \widehat{BAC} = 45^\circ$  car ces 2 angles sont correspondants (les droites  $(DA')$  et  $(AC)$  sont parallèles)
- $\widehat{ADA'} = 180^\circ - 45^\circ = 135^\circ$  car les angles  $\widehat{ADA'}$  et  $\widehat{BDA'}$  sont supplémentaires
- $\widehat{DAA'} = 45^\circ \div 2 = 22,5^\circ$  car  $[AA']$  est la bissectrice de l'angle  $\widehat{BAC}$
- $\widehat{DA'A} = 180^\circ - 135^\circ - 22,5^\circ = 22,5^\circ$  (la somme des angles d'un triangle est  $180^\circ$ ).

## Triangle $ADA'$

Le triangle  $ADA'$  est isocèle en  $D$  car il a 2 angles égaux ( $\widehat{DAA'} = \widehat{DA'A} = 22,5^\circ$ ).