

mathématiques 10e année

le lundi 4 décembre 2023

Mme Barton

mai 30-10:05

TEST

Les angles et les droites

le mercredi 6 décembre

2023

Géométrie, Mesure, Finances 10

But: Géométrie - G5

Démontrer sa compréhension des angles, y compris les angles aigus, droits, obtus, plats et réflexes en : dessinant, répliquant et construisant, divisant en deux parties égales et en résolvant des problèmes.

mai 31-08:43

Géométrie, Mesure, Finances 10

But: Géométrie - G4

Résoudre des problèmes portant sur des lignes parallèles, perpendiculaires et transversales et sur les paires d'angles formés entre elles.

mai 31-08:43

Les angles et les droites

mai 30-10:06

Les angles et les droites

Vocabulaire nécessaire

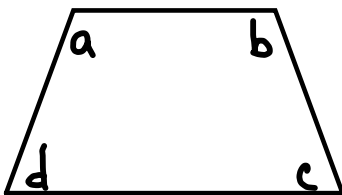
mai 30-10:06

La somme des angles
d'un triangle est 180 degrés.



$$a + b + c = 180^\circ$$

La somme des angles
d'un quadrilatère est 360 degrés.



$$a + b + c + d = 360^\circ$$

mai 28-16:26

Les angles

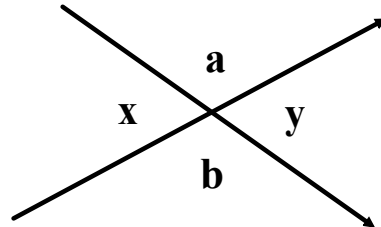
<u>Type d'angle</u>	<u>Mesure</u>	<u>Exemple</u>
angle aigu	entre 0 et 90 degrés	
angle droit	90 degrés	
angle obtus	entre 90 et 180 degrés	
angle plat	180 degrés	
angle rentrant (ou angle réflexe)	entre 180 et 360 degrés	

mai 23-12:20

Les angles

angles opposés

les angles opposés sont toujours égaux



angle $x =$ angle y

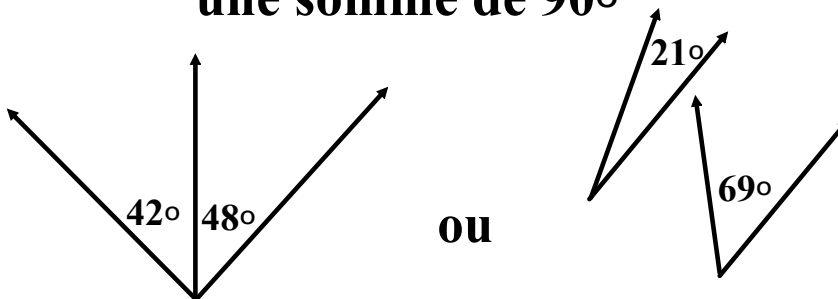
angle $a =$ angle b

mai 23-19:35

Les angles

angles complémentaires

deux angles qui ont
une somme de 90°

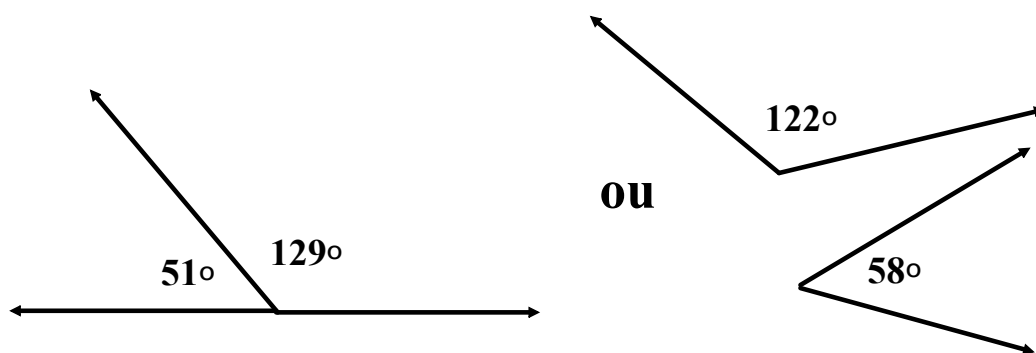


mai 23-19:45

Les angles

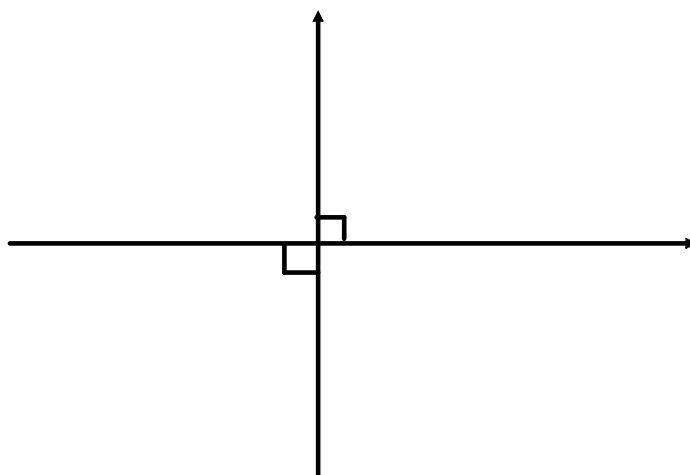
angles supplémentaires

deux angles qui ont
une somme de 180°



mai 23-19:51

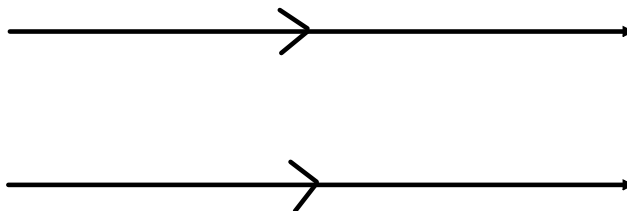
Les droites perpendiculaires



(droites qui se coupent aux angles droits)

mai 29-20:12

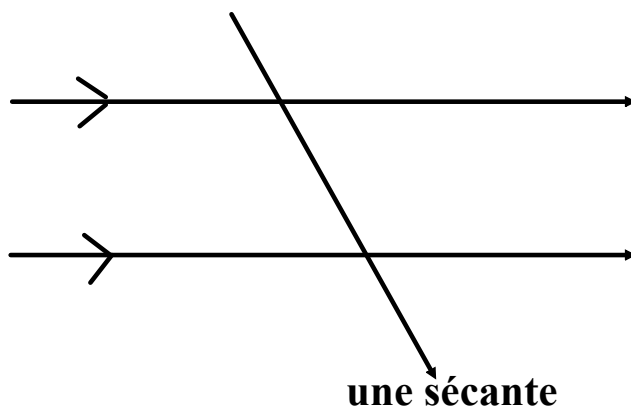
Les droites parallèles



mai 29-20:13

une sécante

une droite qui coupe deux droites parallèles

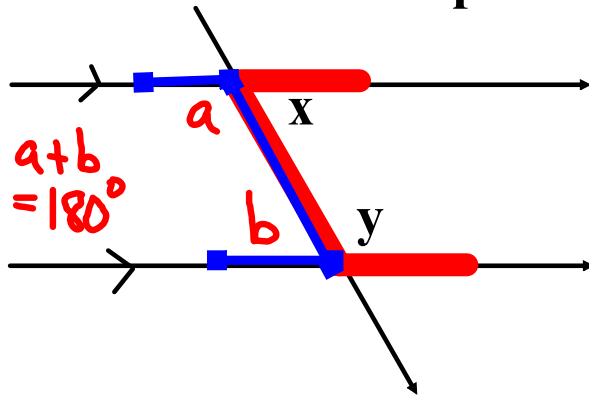


mai 29-20:13

Les angles

angles co-internes

angles qui forment un crochet (C) quand une sécante coupe les droites parallèles



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

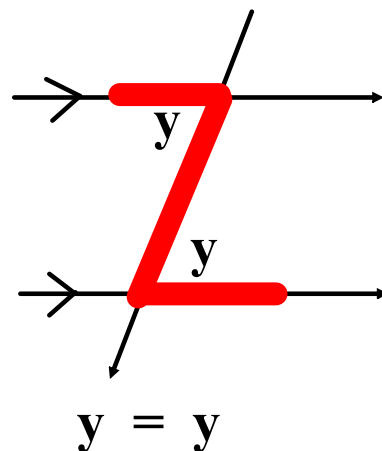
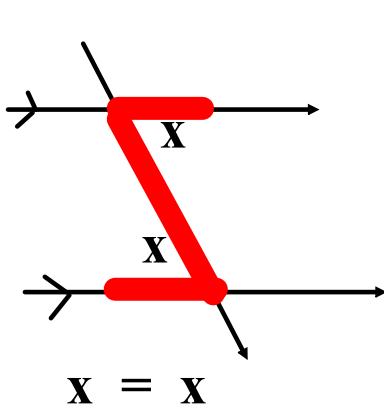
les angles co-internes ont une somme de 180°

mai 23-20:09

Les angles

angles alternes internes

angles qui forment un "Z" quand une sécante coupe les droites parallèles

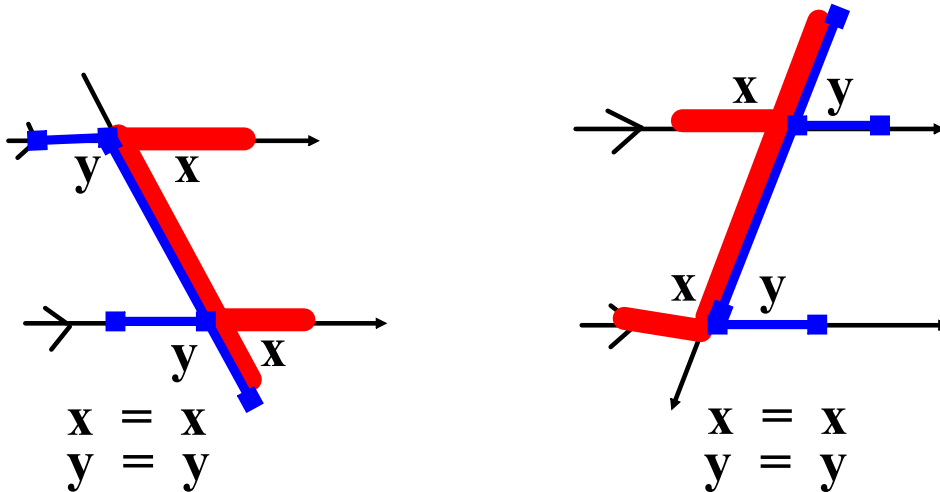


les angles alternes internes sont toujours égaux

mai 23-20:18

Les anglesangles correspondants

angles qui forment un "F" quand une sécante coupe les droites parallèles

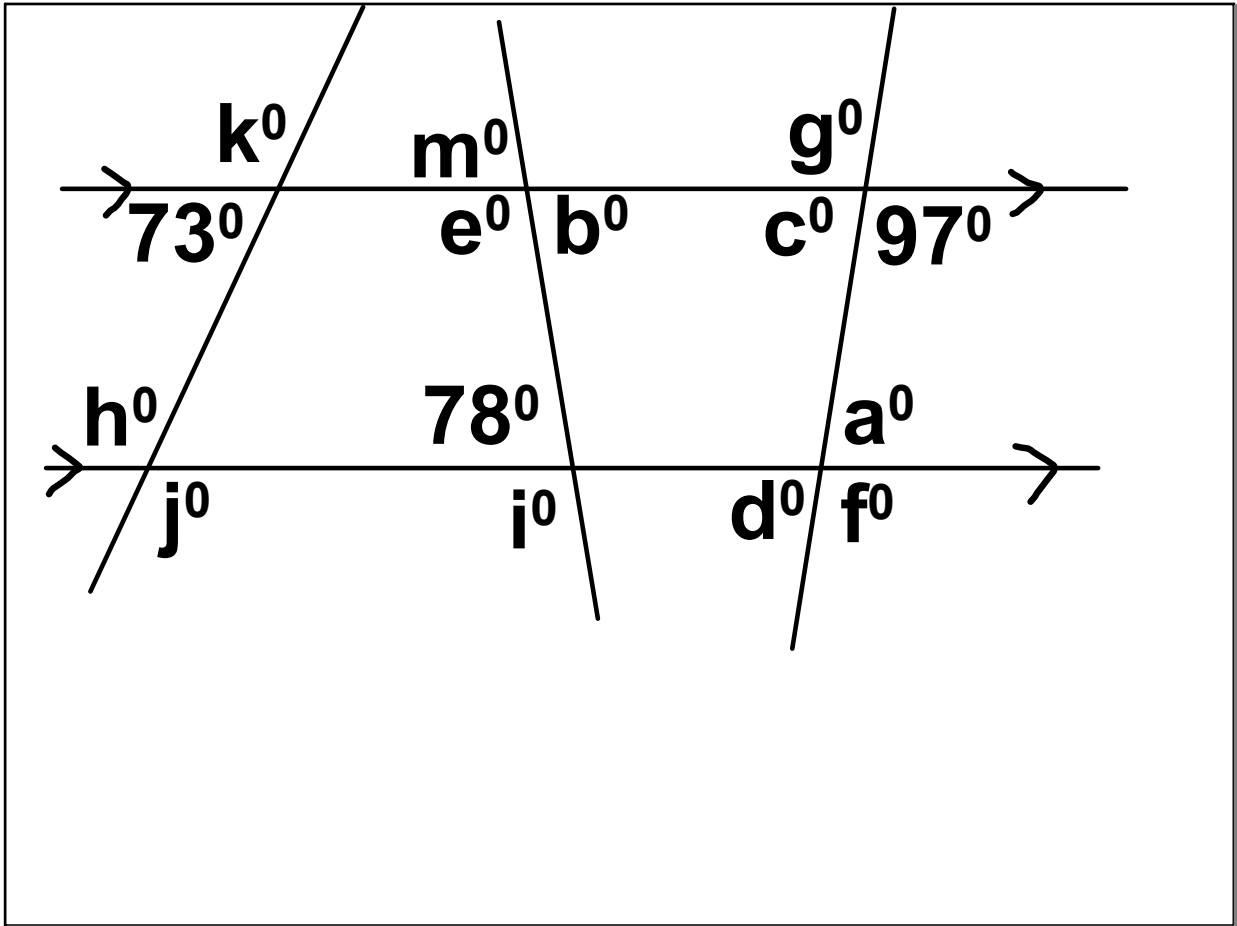


les angles correspondants sont toujours égaux

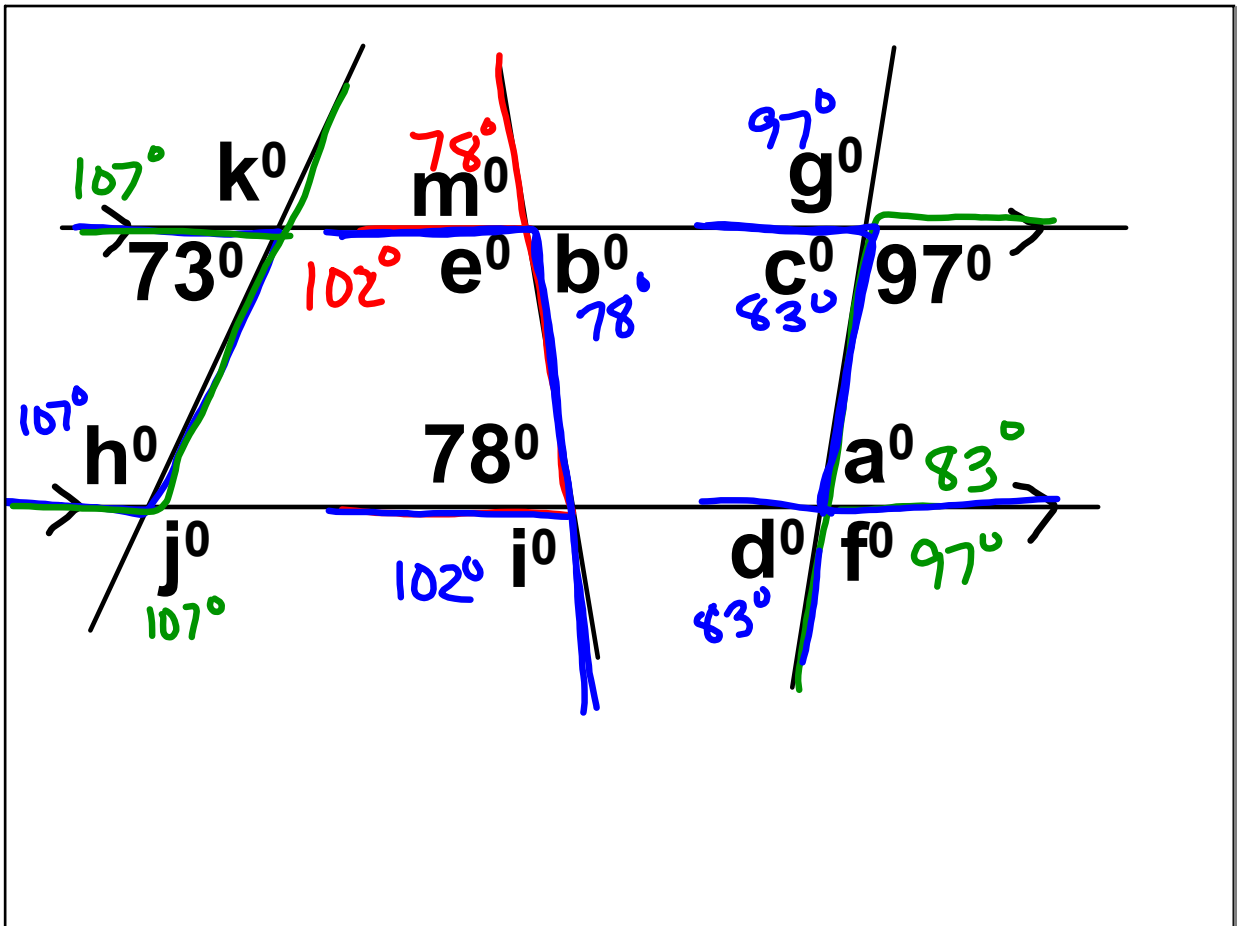
mai 23-20:25

- Copie et complète chaque diagramme suivant.
- Trouve les angles manquants.
- Sois prêt à expliquer ton raisonnement!

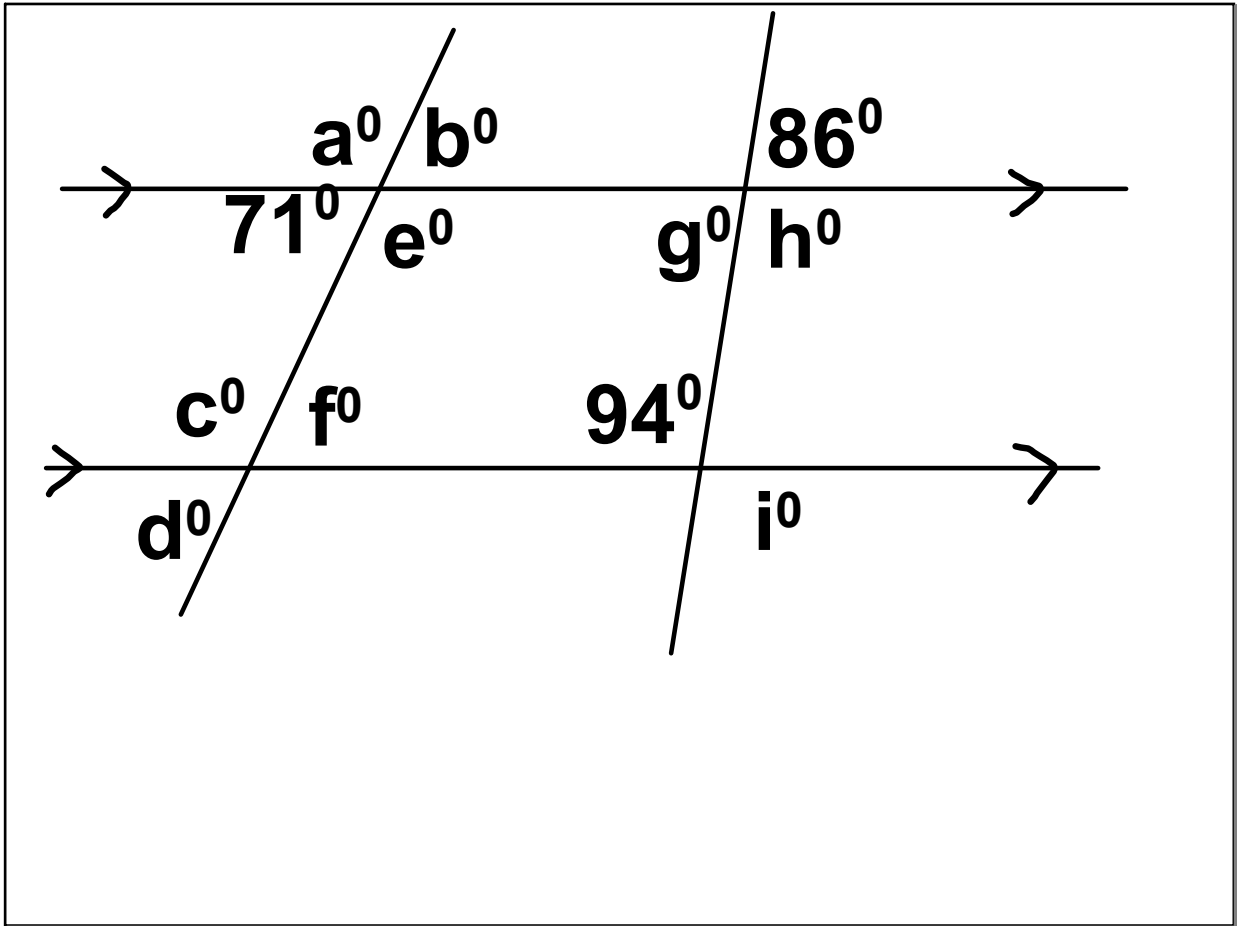
mai 29-20:15



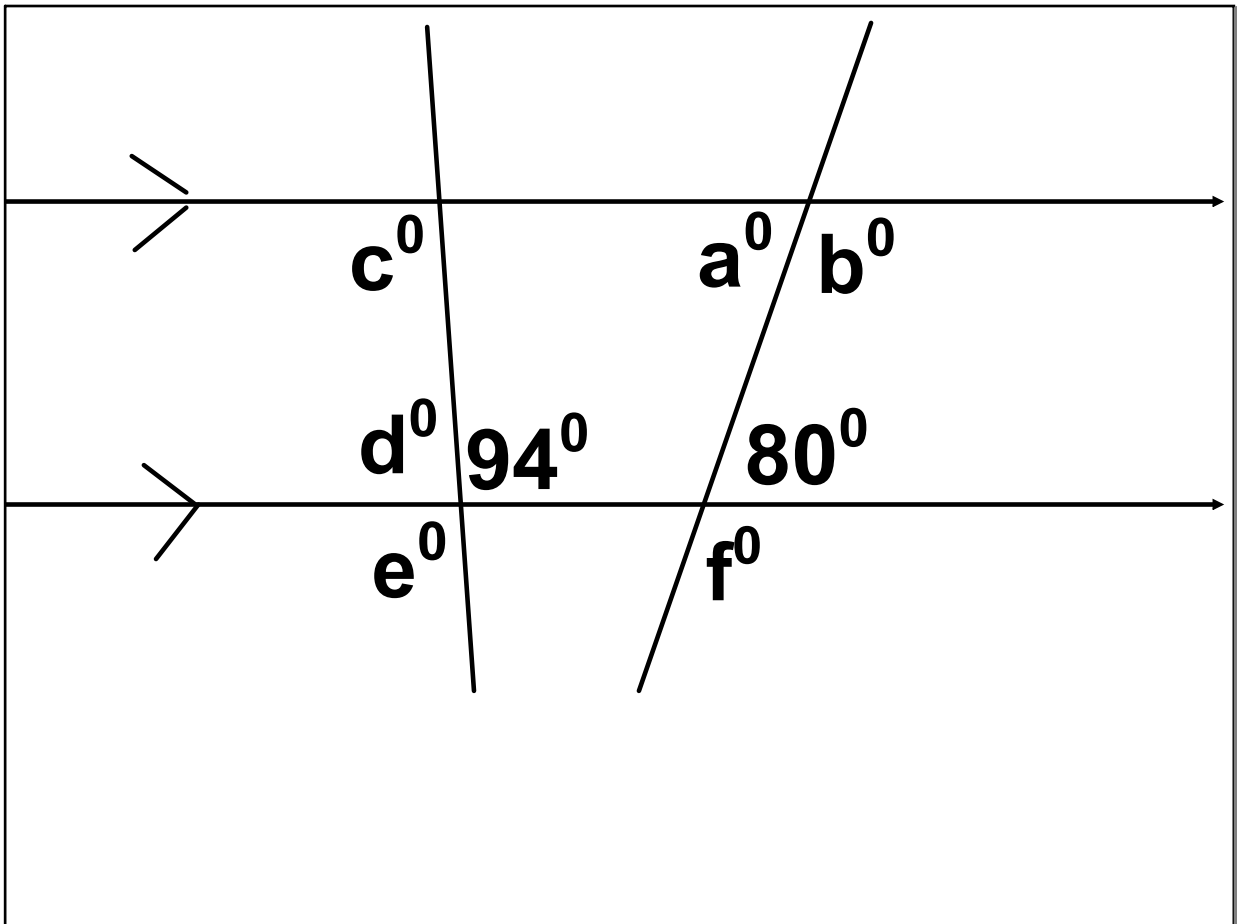
nov. 30-14:16



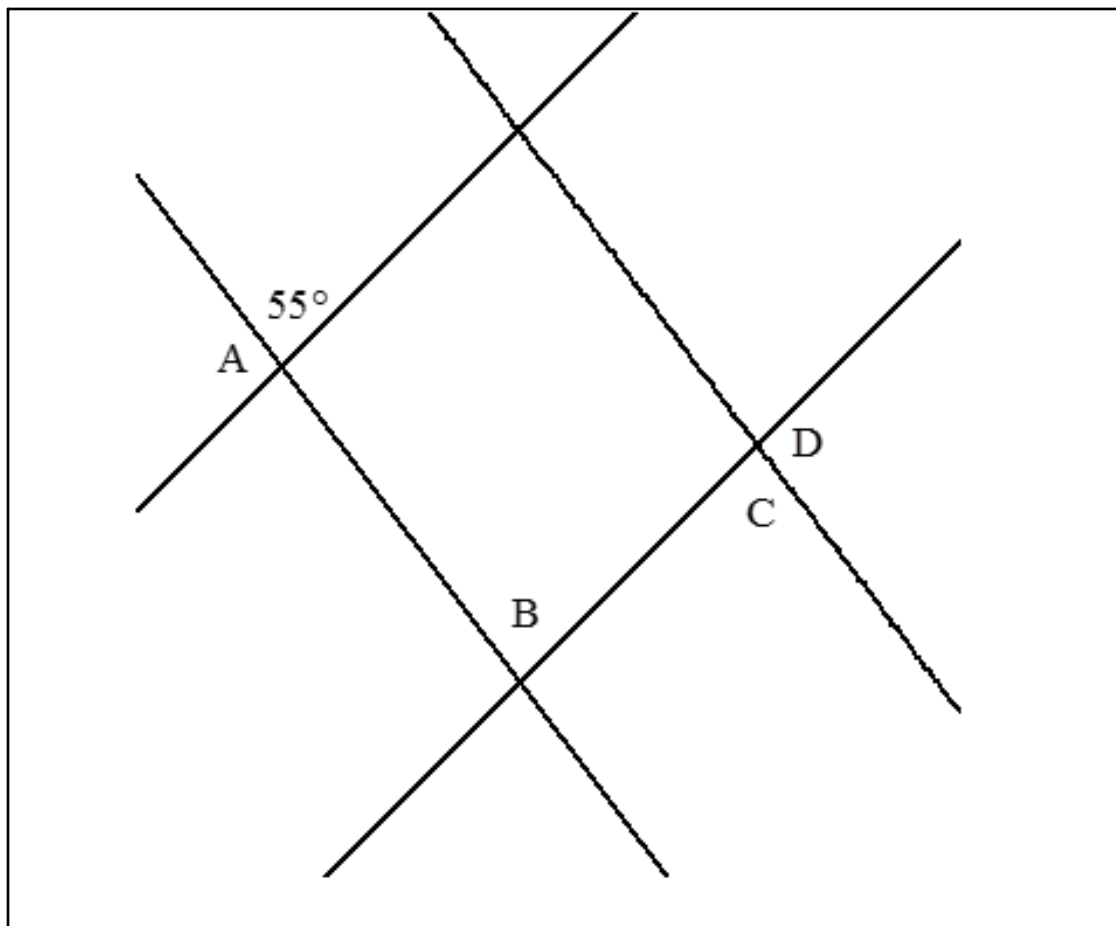
nov. 30-14:16



nov. 30-14:16



mai 29-20:16

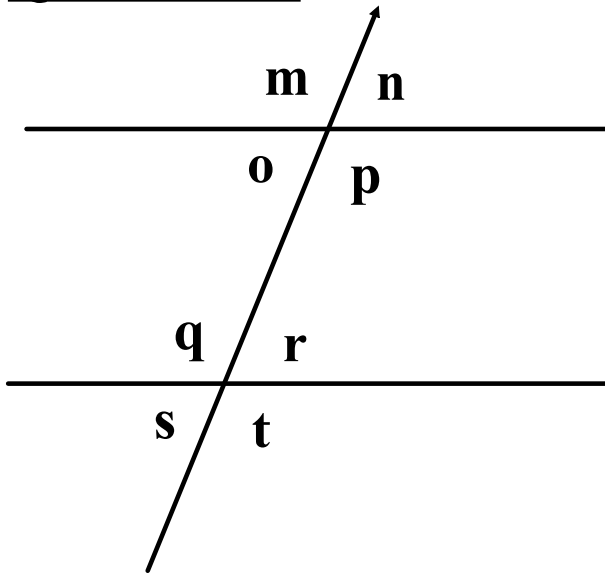


mai 29-20:16

Exercices
Les angles
Page # 2
Questions
1 à 6

mai 30-10:14

Question # 1



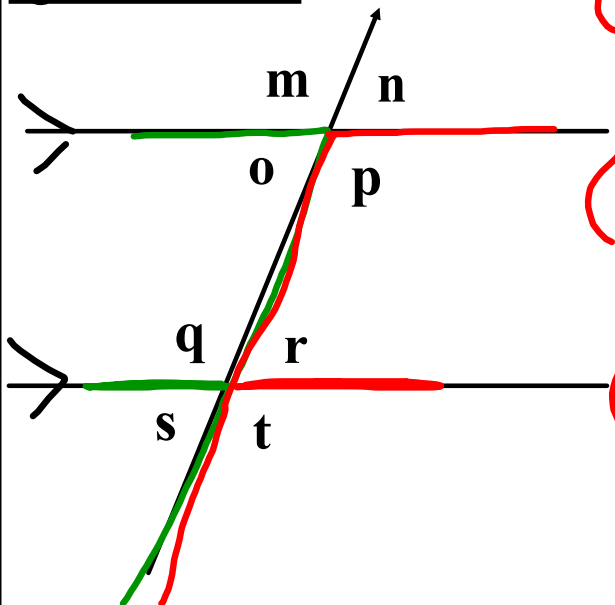
angles alternes-internes

angles co-internes

angles correspondants

mai 29-15:25

Question # 1



(Z) angles alternes-internes

o et r
p et q

(□) angles co-internes

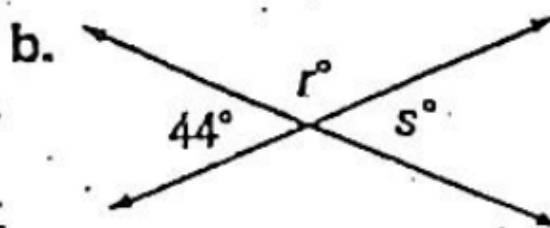
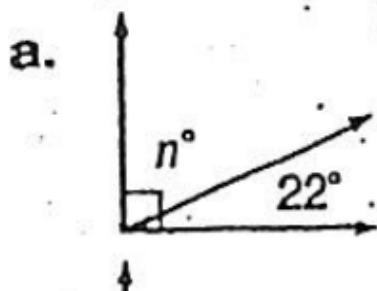
o et q
p et r

(F) angles correspondants

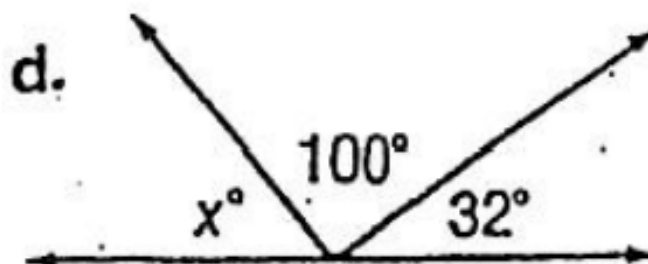
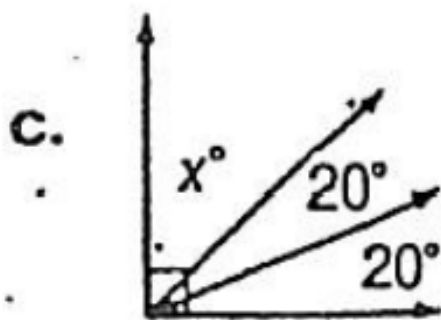
m et q
o et s
n et r
p et t

déc. 1-14:33

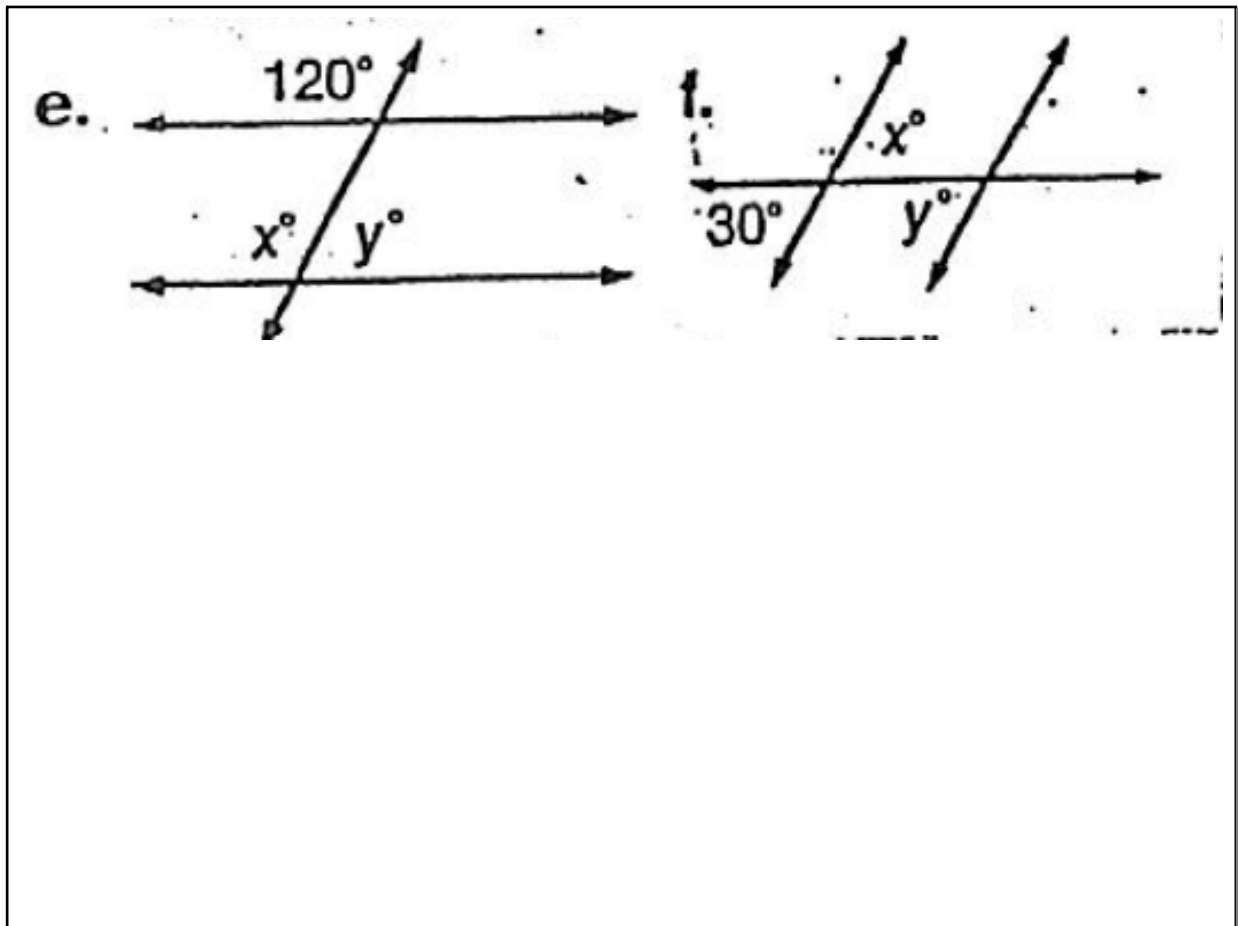
2) Combien mesurent les angles inconnus?



nov. 25-14:40



nov. 25-14:40



nov. 25-14:40

Question 2. Combien mesurent les angles inconnus?

a) $n = 68^{\circ}$

b) $r = 136^{\circ}$ et $s = 44^{\circ}$

c) $x = 50^{\circ}$

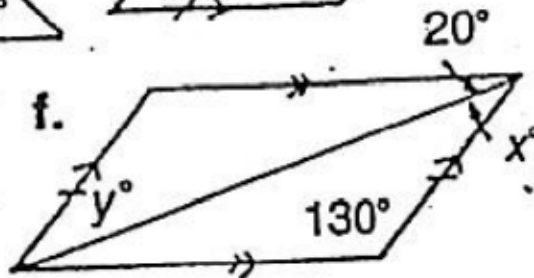
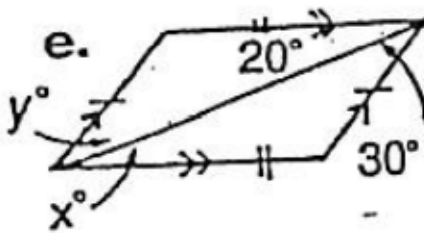
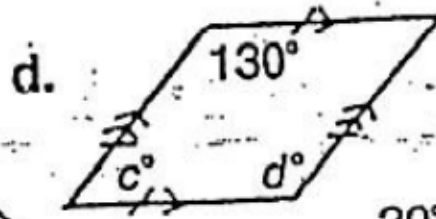
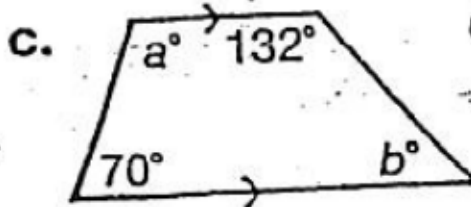
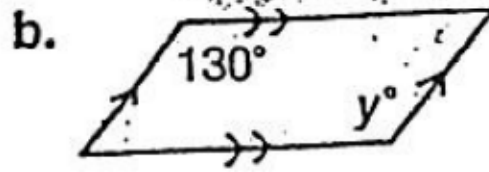
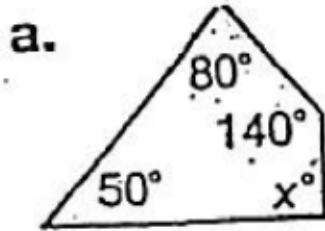
d) $x = 48^{\circ}$

e) $x = 120^{\circ}$ et $y = 60^{\circ}$

f) $x = 30^{\circ}$ et $y = 30^{\circ}$

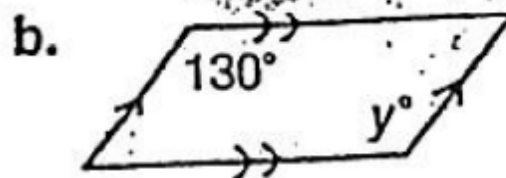
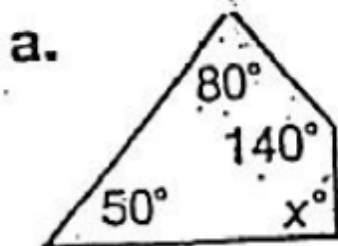
mai 29-15:31

③ Combien mesurent les angles inconnus ?

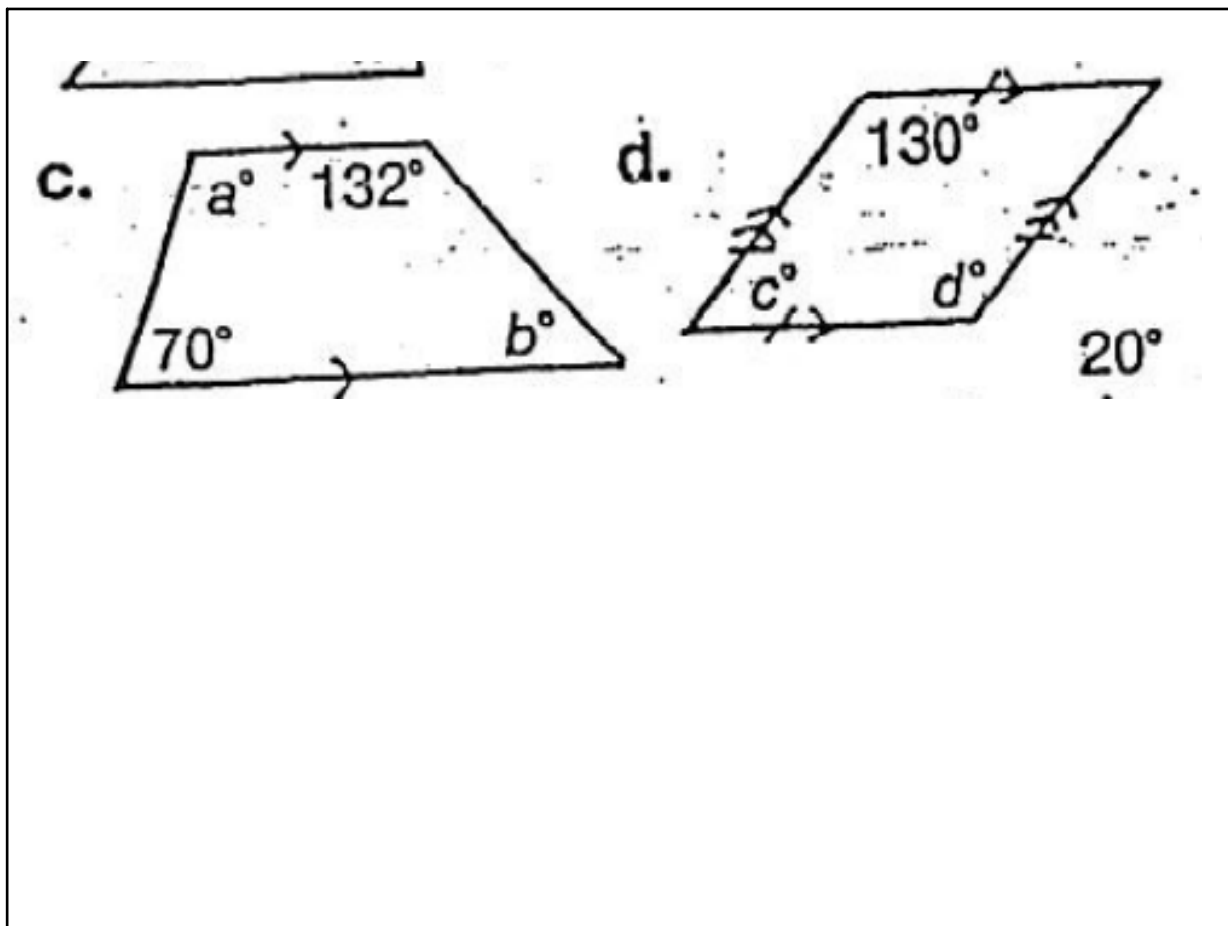


nov. 25-14:41

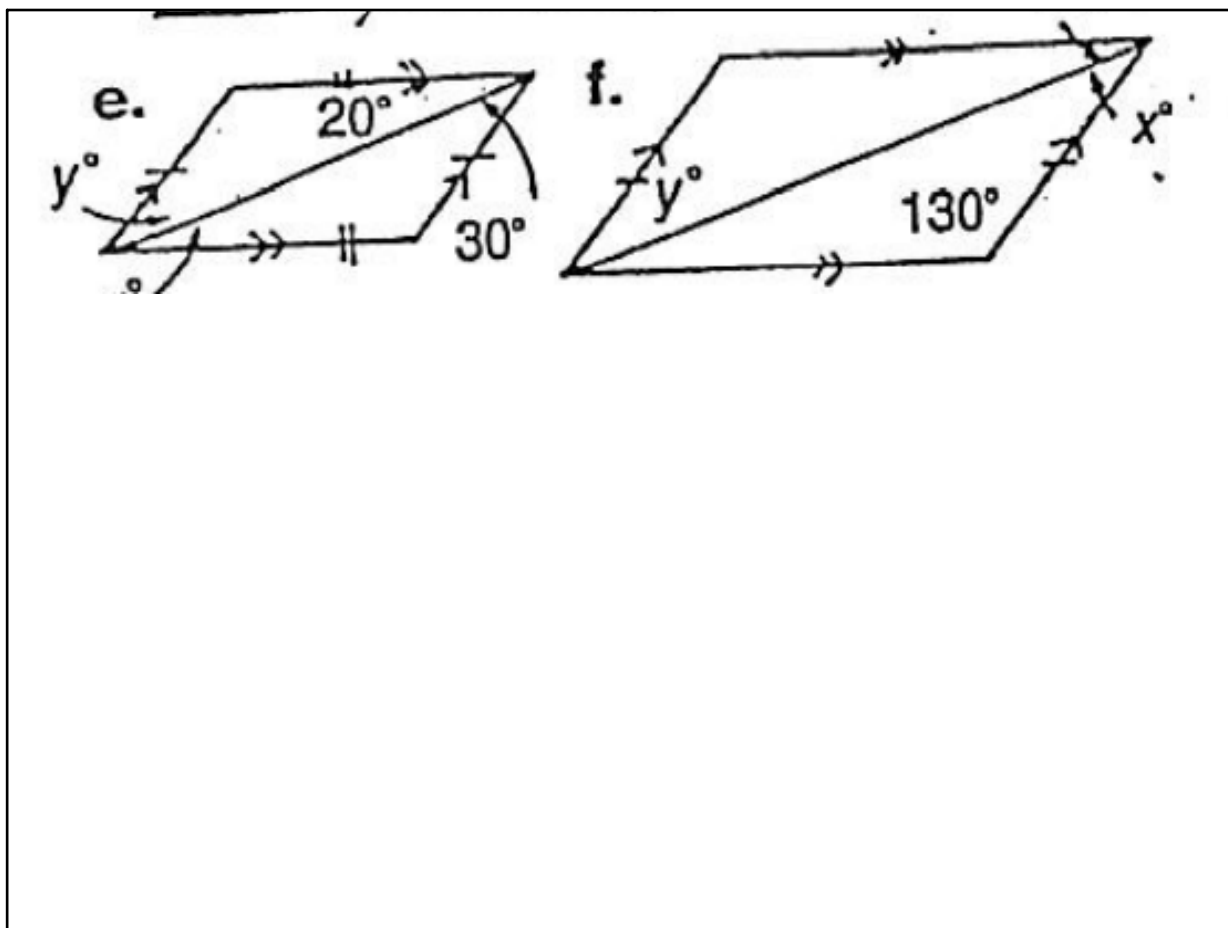
③ Combien mesurent les angles inconnus ?



nov. 25-14:41

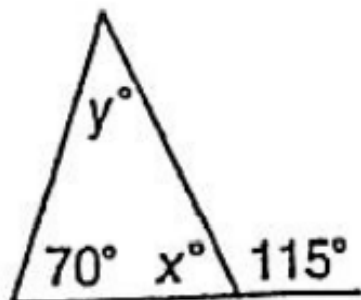


nov. 25-14:41

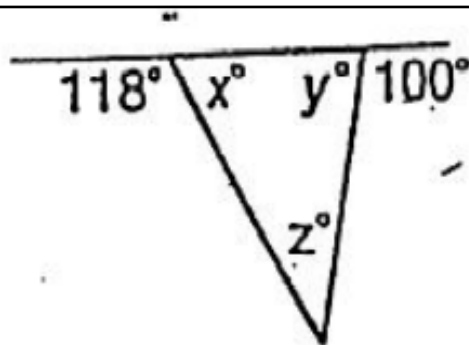


nov. 25-14:42

g.

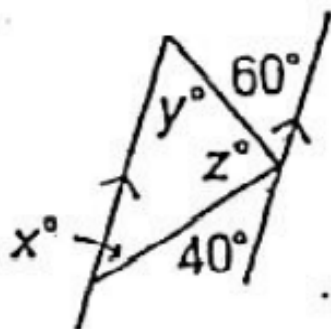


h.

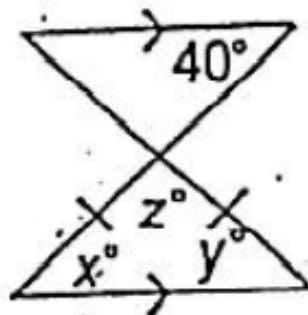


nov. 25-14:42

i.



j.



nov. 25-14:43

Question 3. Combien mesurent les angles inconnus?

a) $x = 90^{\circ}$

b) $y = 130^{\circ}$

c) $a = 110^{\circ}$ $b = 48^{\circ}$ d) $c = 50^{\circ}$ $d = 130^{\circ}$

e) $x = 20^{\circ}$ $y = 30^{\circ}$ f) $x = 30^{\circ}$ $y = 30^{\circ}$


g) $x = 65^{\circ}$ $y = 45^{\circ}$ h) $x = 62^{\circ}$ $y = 80^{\circ}$ $z = 38^{\circ}$


i) $x = 40^{\circ}$ $y = 60^{\circ}$ $z = 80^{\circ}$

j) $x = 40^{\circ}$ $y = 40^{\circ}$ $z = 100^{\circ}$

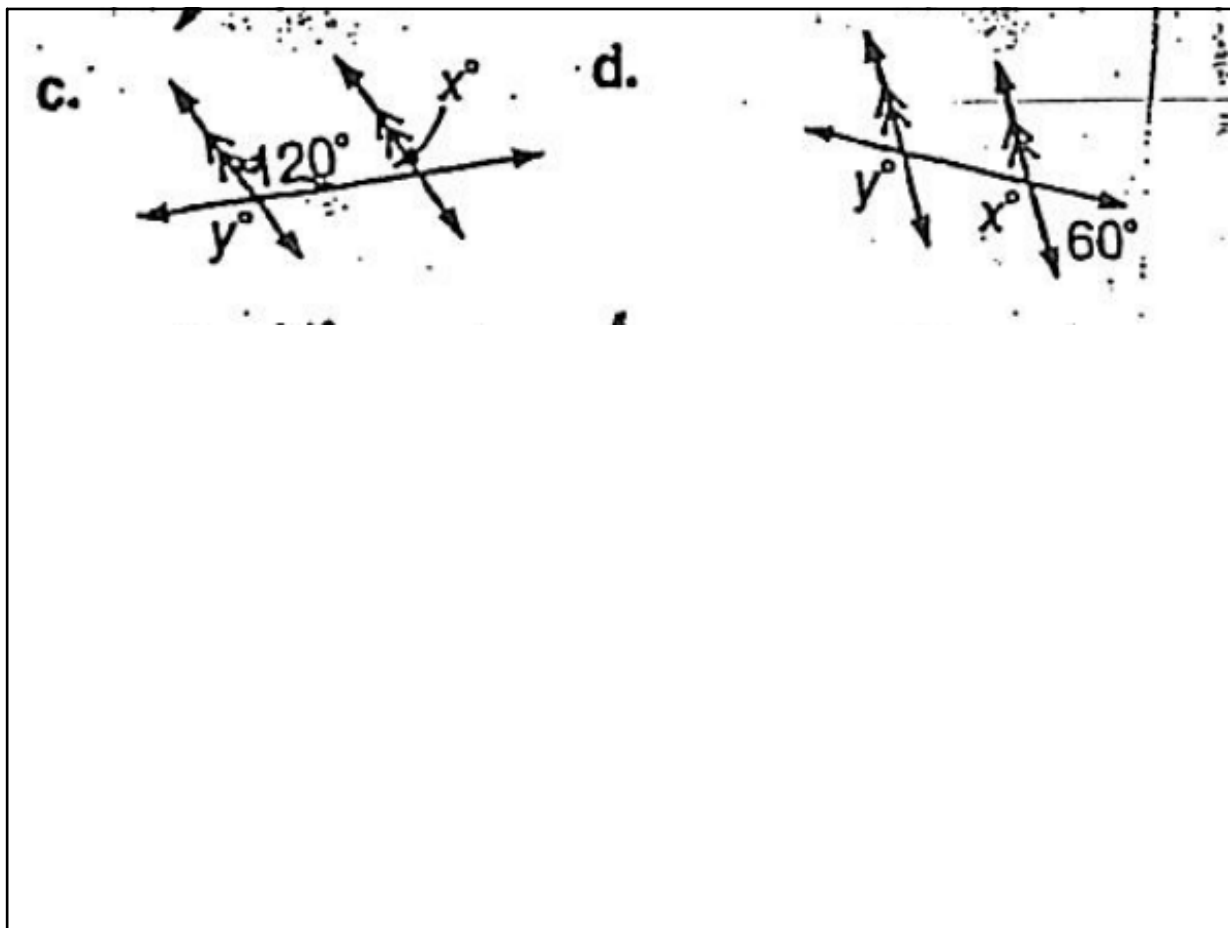
mai 29-15:31

④ Combien mesurent les angles inconnus?

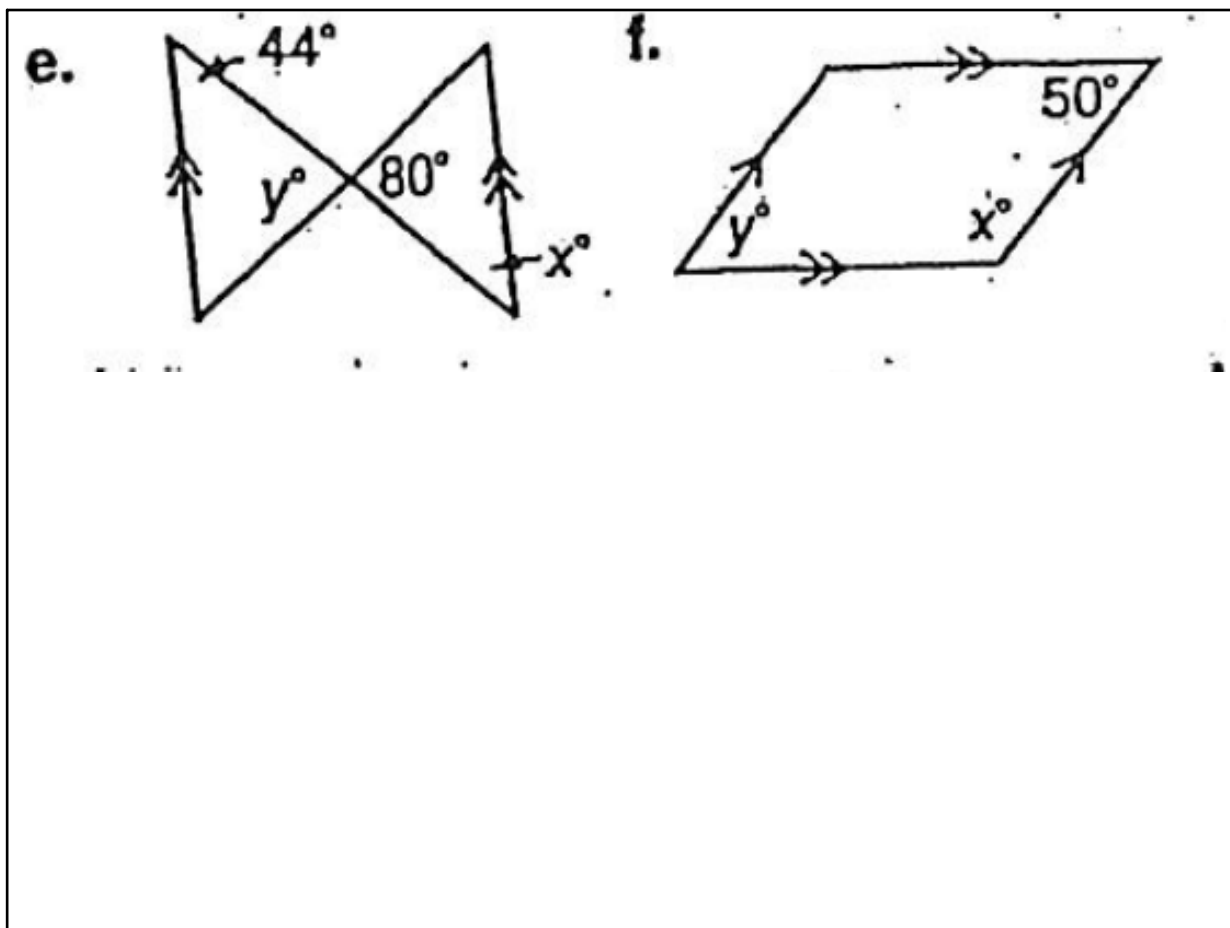
a. 

b. 

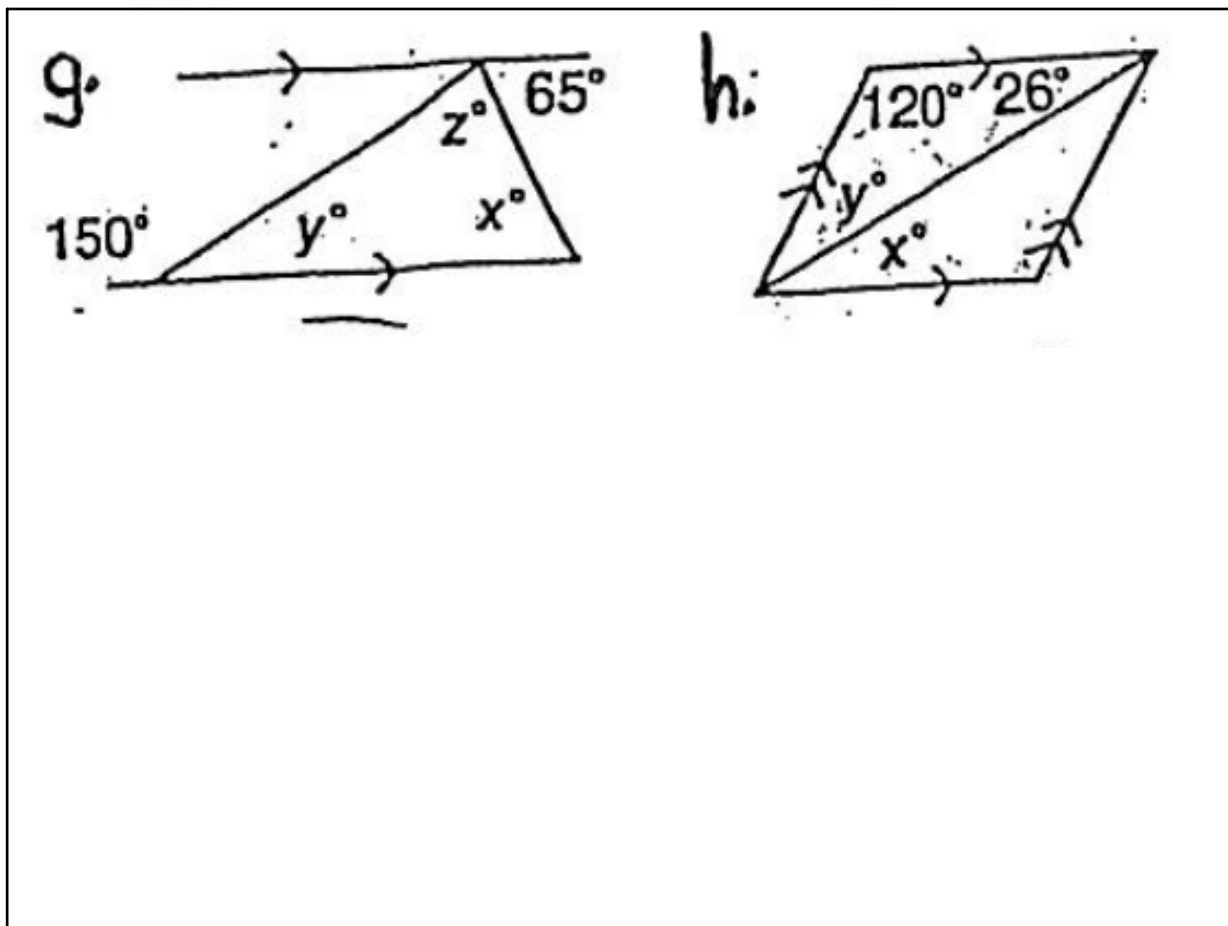
nov. 25-14:43



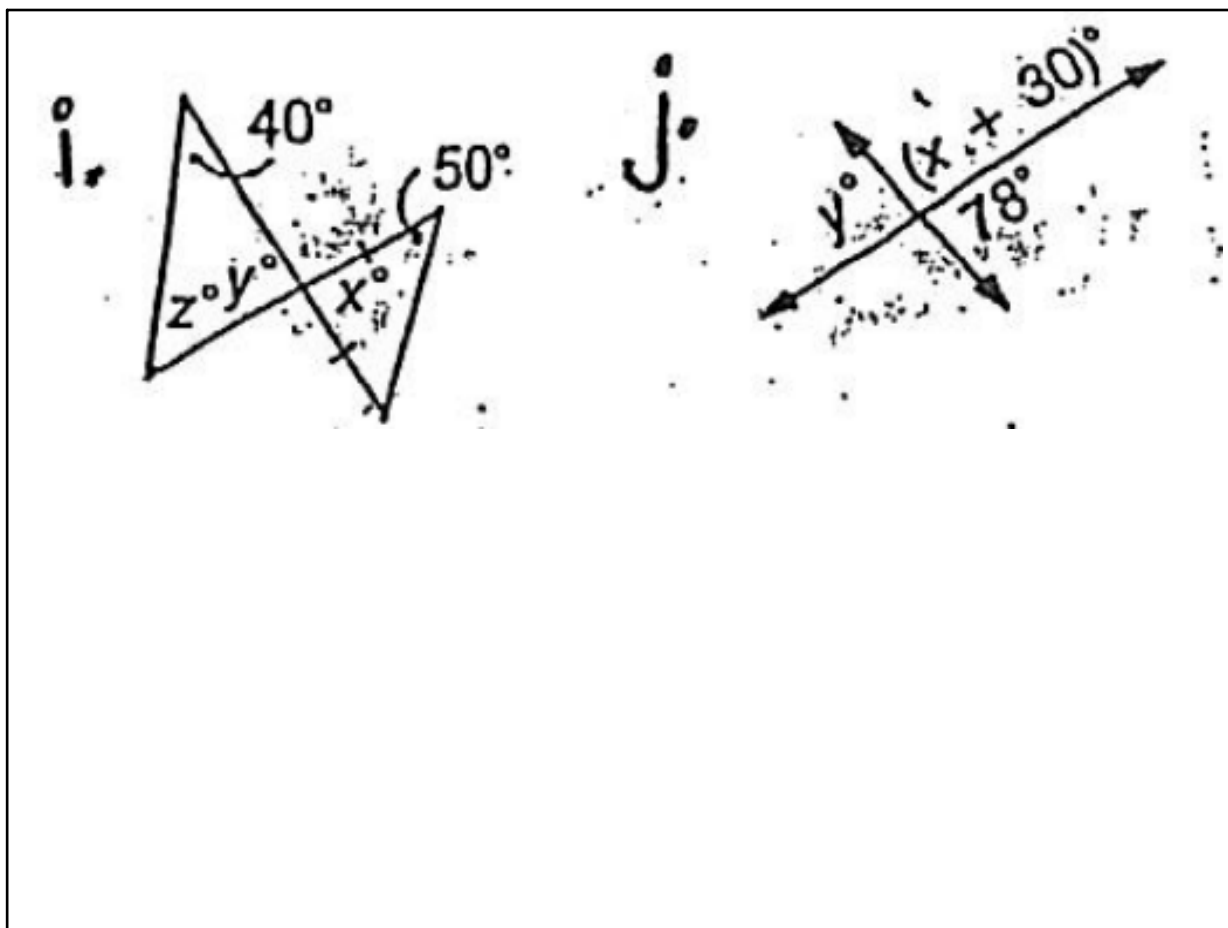
nov. 25-14:43



nov. 25-14:45



nov. 25-14:45



nov. 25-14:45

Question 4. Combien mesurent les angles inconnus?

a) $x = 50^{\circ}$

b) $x = 70^{\circ}$ et $y = 70^{\circ}$

c) $x = 60^{\circ}$ et $y = 120^{\circ}$

d) $x = 120^{\circ}$ et $y = 120^{\circ}$

e) $x = 44^{\circ}$ et $y = 80^{\circ}$

mai 29-20:17

Question 4. Combien mesurent les angles inconnus?

f) $x = 130^{\circ}$ et $y = 50^{\circ}$

g) $x = 65^{\circ}$ et $y = 30^{\circ}$ et $z = 85^{\circ}$

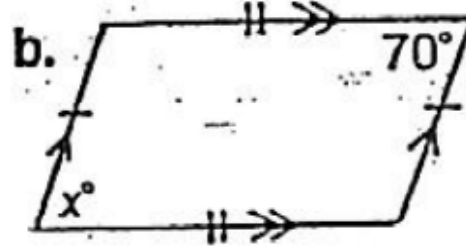
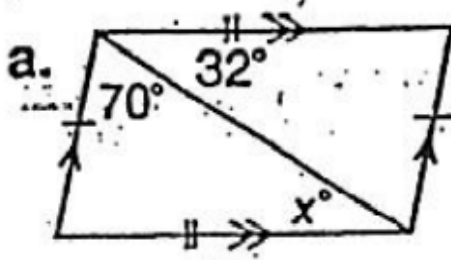
h) $x = 26^{\circ}$ et $y = 34^{\circ}$

i) $x = 80^{\circ}$ et $y = 80^{\circ}$ et $z = 60^{\circ}$

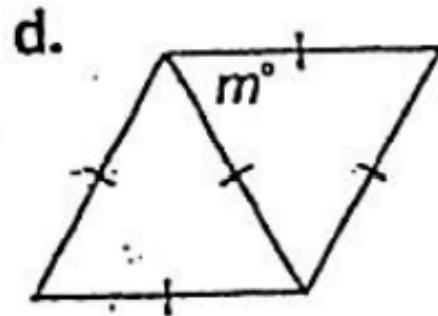
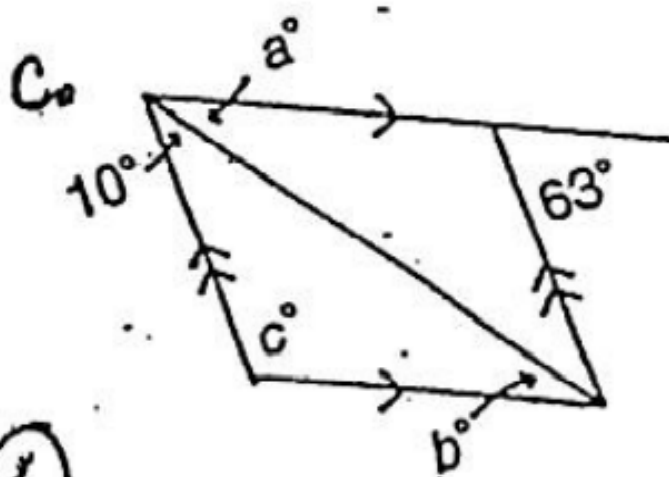
j) $x = 72^{\circ}$ et $y = 78^{\circ}$

mai 29-20:17

5. Combien mesurent les angles inconnus?



nov. 25-14:45



nov. 25-14:46

Question 5. Combien mesurent les angles inconnus?

a) $x = 32^{\circ}$

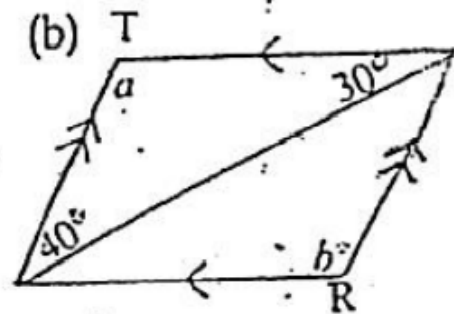
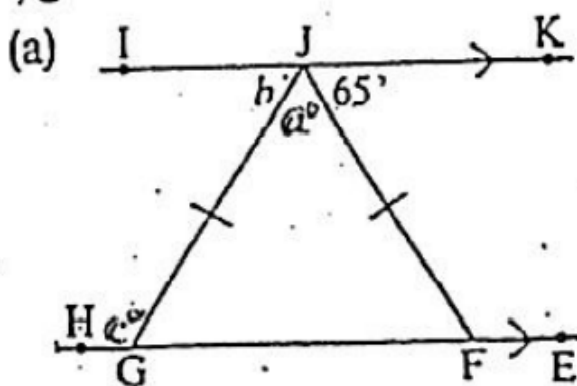
b) $x = 70^{\circ}$

c) $a = 53^{\circ}$ et $b = 53^{\circ}$ et $c = 117^{\circ}$

d) $m = 60^{\circ}$

mai 29-20:17

6. Trouve les valeurs de a , de b et de c dans les figures suivantes.



nov. 25-14:47

Question 6. Combien mesurent les angles inconnus?

a) $a = 50^{\circ}$ et $b = 65^{\circ}$ et $c = 115^{\circ}$

b) $a = 110^{\circ}$ et $b = 110^{\circ}$

mai 29-20:18

La géométrie

Questions 1, 2 et 3

À compléter sur la feuille
photocopiée

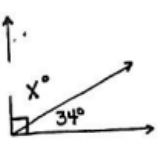
nov. 30-14:49

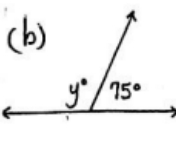
La géométrie

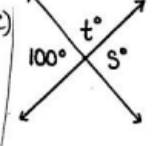
nom _____

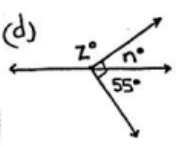
GMF 10

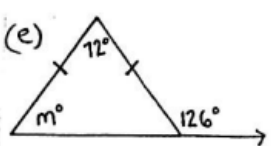
31

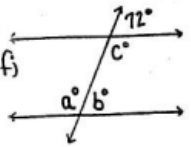
a)  $x = \underline{\hspace{2cm}}$

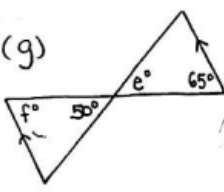
(b)  $y = \underline{\hspace{2cm}}$

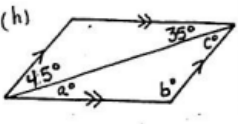
(c)  $s = \underline{\hspace{2cm}}$ $t = \underline{\hspace{2cm}}$

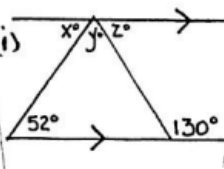
(d)  $z = \underline{\hspace{2cm}}$ $n = \underline{\hspace{2cm}}$

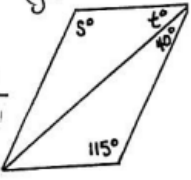
(e)  $m = \underline{\hspace{2cm}}$

(f)  $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $c = \underline{\hspace{2cm}}$

(g)  $e = \underline{\hspace{2cm}}$
 $f = \underline{\hspace{2cm}}$

(h)  $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $c = \underline{\hspace{2cm}}$

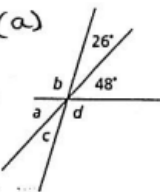
(i)  $x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$
 $z = \underline{\hspace{2cm}}$

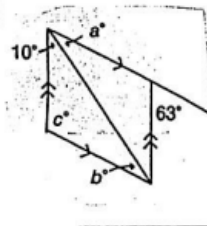
(j)  $s = \underline{\hspace{2cm}}$
 $t = \underline{\hspace{2cm}}$

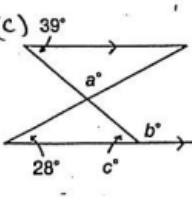
nov. 28-15:05

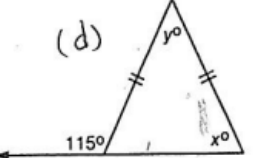
T = _____

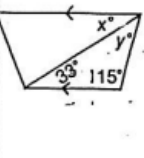
Q2

(a)  $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $c = \underline{\hspace{2cm}}$
 $d = \underline{\hspace{2cm}}$

(b)  $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $c = \underline{\hspace{2cm}}$

(c)  $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $c = \underline{\hspace{2cm}}$

(d)  $x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

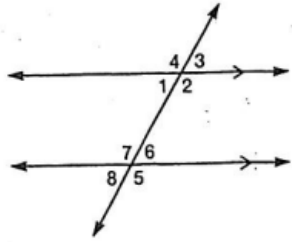
(e)  $x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

nov. 30-14:49

Q3

- alternes-internes
- correspondants
- co-internes
- opposés

Nomme les paires d'angles.



a. 1, 8 _____
b. 2, 6 _____
c. 2, 7 _____
d. 6, 8 _____

nov. 30-14:49

RÉPONSES!

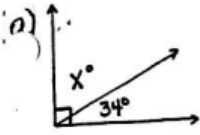
La géométrie

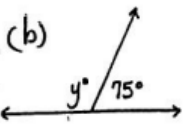
Questions 1, 2 et 3

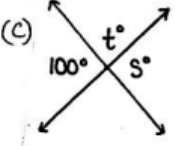
À compléter sur la feuille
photocopiée

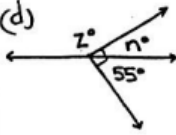
nov. 30-14:49

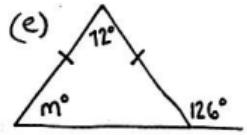
Q1 GMF 10 La géométrie nom Mme Barton

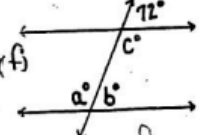
(a)  $x = 56^\circ$

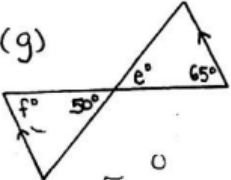
(b)  $y = 105^\circ$

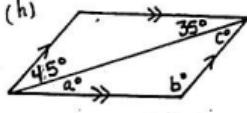
(c)  $s = 100^\circ$ $t = 80^\circ$

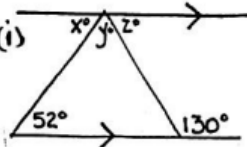
(d)  $z = 145^\circ$

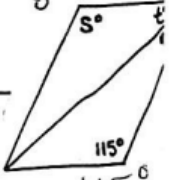
(e)  $m = 54^\circ$

(f)  $a = 108^\circ$
 $b = 72^\circ$
 $c = 108^\circ$

(g)  $e = 50^\circ$
 $f = 65^\circ$

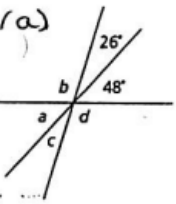
(h)  $a = 35^\circ$
 $b = 100^\circ$
 $c = 45^\circ$

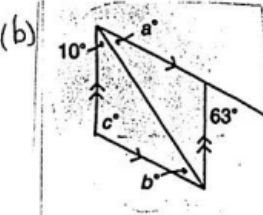
(i)  $x = 52^\circ$
 $y = 78^\circ$
 $z = 50^\circ$

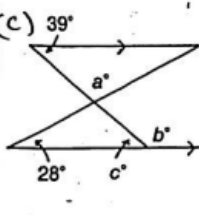
(j)  $s = 115^\circ$
 $t = 25^\circ$

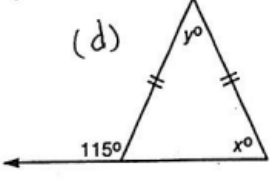
nov. 30-14:52

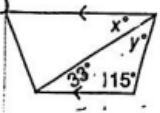
Q2 $t = \llcorner$

(a)  $a = 48^\circ$
 $b = 106^\circ$
 $c = 26^\circ$
 $d = 106^\circ$

(b)  $a = 53^\circ$
 $b = 53^\circ$
 $c = 117^\circ$

(c)  $a = 113^\circ$
 $b = 141^\circ$
 $c = 39^\circ$

(d)  $x = 65^\circ$
 $y = 50^\circ$

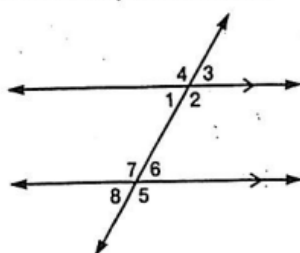
(e)  $x = 33^\circ$
 $y = 32^\circ$

nov. 30-14:52

Q3

- alternes-internes
- correspondants
- co-internes
- opposés

Nomme les paires d'angles.



- a. 1, 8 correspondants
- b. 2, 6 co-internes
- c. 2, 7 alternes-internes
- d. 6, 8 opposés

nov. 30-14:53