ÉVALUATION DIAGNOSTIQUE
DES ÉLÈVES ALLOPHONES

Mathématiques

CYCLE 4 - FIN DE 3E

Langue d'origine : anglais

CANOPÉ

SURNAME: | FIRST NAME:

Matériel nécessaire : crayon, gomme, règle graduée.

EXERCICE 1

"RIGHT" or "WRONG"? (Circle the right answer)

a)	5 is a multiple of 10.	• RIGHT	• WRONG
b)	5 is a common divisor of 30 and of 45.	• RIGHT	• WRONG
c)	The list of all the divisors of 10 is 2 and 5.	• RIGHT	• WRONG
d)	The list of all the divisors of 60 is: 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 10 ; 12 ; 15 ; 20 ; 30 ; 60.	• RIGHT	• WRONG

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EXERCICE 2

Circle the right answer.

$[2a - 1)(a + 2) + (2a - 1)(3a + 1) =$

- $(3a + 1)a$
- $8a - 1$
- $(2a - 1)(4a + 3)$
- $(2a - 1)(4a^2 + 1)$

$(3a + 1)^2 - (2a + 1)(3a + 1) =$

- $2a - 1$
- $a(3a + 1)^2$
- $(3a + 1)(5a + 2)$
- $(3a + 1)a$

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EXERCICE 3

Circle the right answer.

$(2a + 3)^2 =$

- $25a^2$
- $4a^2 + 12a + 9$
- $2a^2 + 6a + 9$
- $4a^2 + 9$

$(5a + 3)(5a - 3) =$

- $5a^2 - 9$
- $(5a)^2 + 9$
- $25a^2 - 9$
- $5^2a - 9$

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EXERCICE 4

Solve: $(4x + 3)(3x - 18) = 0$

.....

.....

.....

.....

Answer: .....

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EXERCICE 5

Complete:

$f(5)$ = ...

(or "the image of 5 under f is .....")

f(.....) = 1

(or "the image of ..... under f is 1")

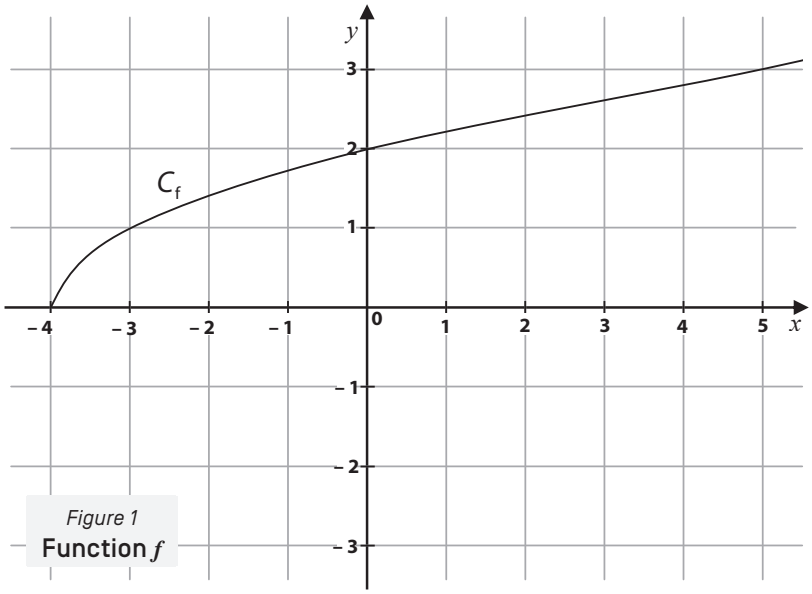

Figure 1
Function f

Complete:

x	– 2	.....	3
g(x)	.....	1	.....

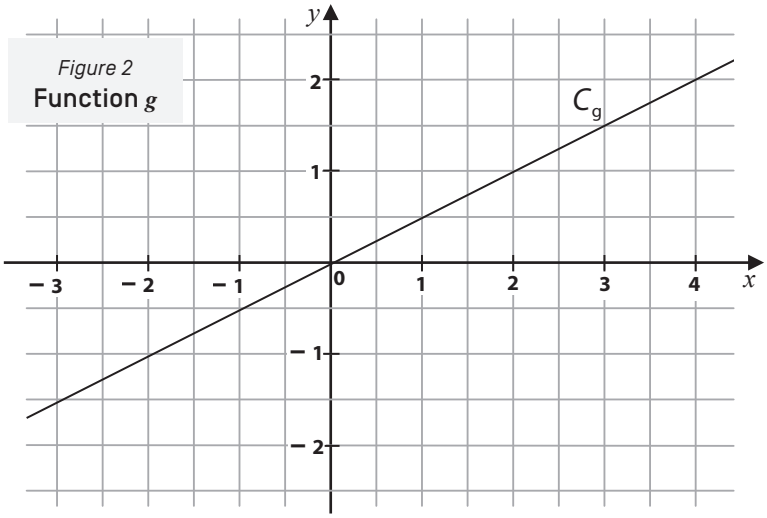

Figure 2
Function g

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EXERCICE 6

f is the function that associates $f(x) = 4x$ to a number x

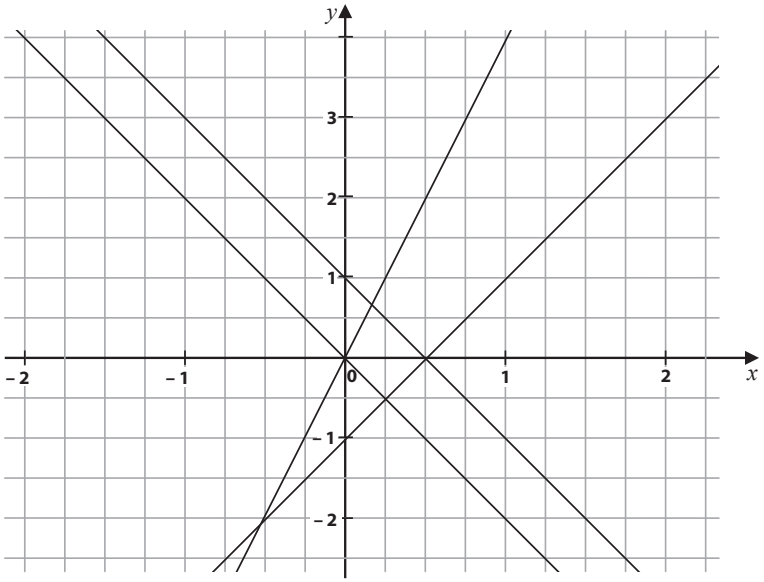
g is the function that associates $g(x) = -2x$ to a number x

h is the function that associates $h(x) = 2x - 1$ to a number x

Colour the graphic representation of f red.

Colour the graphic representation of g green.

Colour the graphic representation of h blue.



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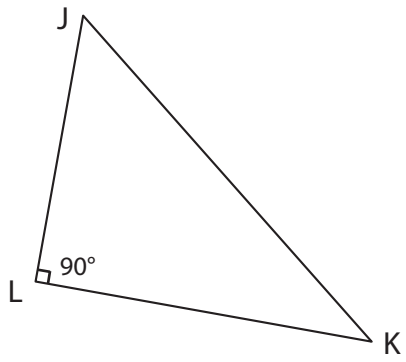
EXERCICE 7

Observe carefully this triangle:

$[JL] \perp [LK]$

$\widehat{LJK} = 30°$

$LK = 10$ cm



Circle the right answer:

$\sin \widehat{JKL} =$

- $\frac{LK}{JK}$
- $\frac{JK}{LK}$
- $\frac{LJ}{JK}$
- $\frac{LK}{LJ}$

$\cos \widehat{LJK} =$

- $\frac{LJ}{LK}$
- $\cos 30°$
- 1,5
- 30°

$JL =$

- $LK \times \tan [\widehat{LJK}]$
- $\frac{LK}{\tan [\widehat{LJK}]}$
- $\frac{JK}{LK}$
- 24°

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EXERCICE 8

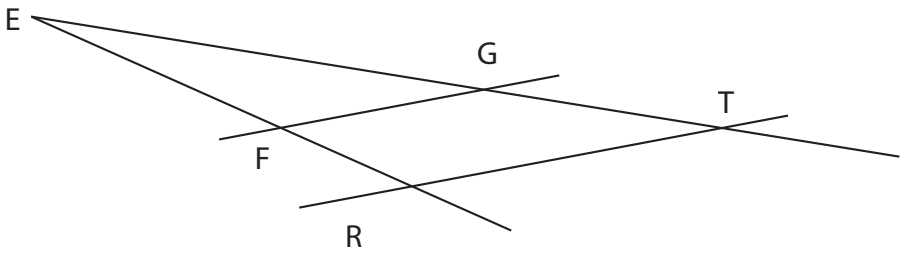
(RT)//(FG)

ET = 4,5 cm

FG = 2,2 cm

EF = 4 cm

ER = 6 cm



Complete:

$$\frac{\ldots\ldots}{ER} = \frac{FG}{RT} = \frac{\ldots\ldots}{\ldots\ldots}$$

Calculate EG:

.....

.....

.....

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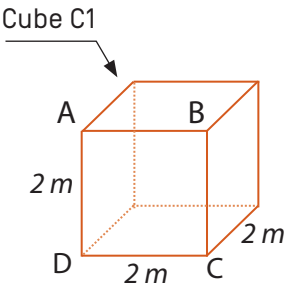
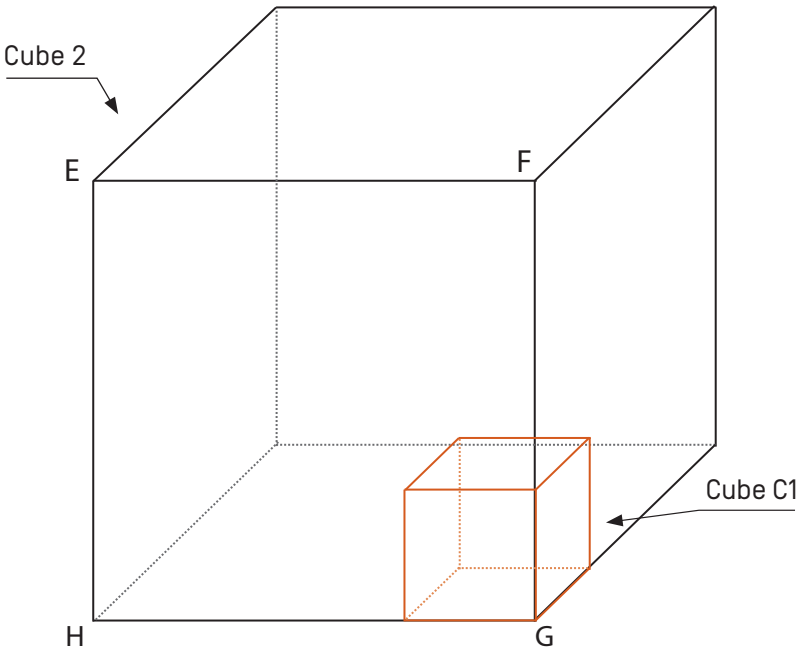
EXERCICE 9





a) Complete:

Edge AB = 2 m

Area ABCD = ...

Volume C1 = ...

b) Complete:

Edge GH = 2 × 3 = 6 m

Area EFGH = ...

Volume C2 = ...

c) Complete:

[Area EFGH] = [Area ABCD] × a $\quad a$ = ...

[Volume C2] = [Volume C1] × b $\quad b$ = ...

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