## **OPERATIONS SUR LES NOMBRES RELATIFS**

EXERCICE 5

## **CORRIGE – M. QUET**

## **EXERCICE** 1

а	b	с	$\mathbf{a} + \mathbf{b} + \mathbf{c}$	<b>a</b> + <b>b</b> - <b>c</b>	$\mathbf{a} - \mathbf{b} + \mathbf{c}$	a – b – c
1	-2	3	1 + (-2) + 3 = 2	1 + (-2) - 3 = -4	1 - (-2) + 3 = 6	1 - (-2) - 3 = 0
4	-5	6	4 + (-5) + 6 = 5	4 + (-5) - 6 = -7	4 - (-5) + 6 = 15	4 - (-5) - 6 = 3
-3	2	-1	-3+2+(-1)=-2	-3+2-(-1)=0	-3-2+(-1)=-6	-3-2-(-1)=-4
6	-2	-7	6 + (-2) + (-7) = -3	6 + (-2) - (-7) = 11	6 - (-2) + (-7) = 1	6 - (-2) - (-7) = 15
-6	-1	-3	-6 + (-1) + (-3) = -10	-6 + (-1) - (-3) = -4	-6 - (-1) + (-3) = -8	-6 - (-1) - (-3) = -2

<b>EXERCICE 2:</b> $A = x + 7$	
	Si $x = -3$
Alors $A = x + 7$	Alors $A = x + 7$
$\mathbf{A} = 5 + 7$	A = -3 + 7
$\Lambda = 12$	$\Lambda - \Lambda$

Si $x = -4$	Si $x = -7$	
Alors $A = x + 7$	Alors $A = x + 7$	
A = -4 + 7	A = -7 + 7	
A = 3	$\mathbf{A} = 0$	
Done $u \downarrow 7 = 0$ nouse $u = 7$		

Donc 
$$x + 7 = 0$$
 pour  $x = -$ 

<b>EXERCICE 3:</b> $B = 8 + x$		
Si $x = 11$	Si $x = -9$	
Alors $\mathbf{B} = 8 + x$	Alors $\mathbf{B} = 8 + \mathbf{x}$	
B = 8 + 11	$\mathbf{B} = 8 + (-9)$	
<b>B</b> = 19	$\mathbf{B} = -1$	
Si $x = -7$	Si $x = -11$	
Alors $\mathbf{B} = 8 + x$	Alors $\mathbf{B} = 8 + \mathbf{x}$	
$\mathbf{B} = 8 + (-7)$	B = 8 + (-11)	
<b>B</b> = 1	$\mathbf{B} = -3$	
Donc $x = -9$ et $x = -11$ vérifient $8 + x < 0$		

<b>EXERCICE 4:</b> $C = 13 - x$		
Si $x = 11$	Si $x = -9$	
Alors $C = 13 - x$	Alors $C = 13 - x$	
C = 13 - 11	C = 13 - (-9)	
C = 2	$\mathbf{C} = 22$	
Si <i>x</i> = 19	Si $x = -11$	
Alors $C = 13 - x$	Alors $C = 13 - x$	
C = 13 - 19	C = 13 - (-11)	
$\mathbf{C} = -6$	$\mathbf{C} = 24$	
Donc $13 - x \ge -2$ pour $x = 11, x = -9, x = -11$		

## **EXERCICE 5 :** D = -x - 31

Si $x = 6$	Si $x = -13$			
Alors $D = -x - 31$	Alors $D = -x - 31$			
D = -6 - 31	D = -(-13) - 31			
$\mathbf{D} = -37$	$\mathbf{D} = -18$			
Si $x = -9$	Si $x = -6$			
Alors $D = -x - 31$	Alors $D = -x - 31$			
D = -(-9) - 31	D = -(-6) - 31			
$\mathbf{D} = -22$	$\mathbf{D} = -25$			

Donc aucune de ces valeurs n'est solution de l'inéquation -x - 31 > -2