

3 <sup>e</sup>	Fiche compétences Alg chapitre 1	Littéral 2 (N42)
<u>exercice 1:</u>	<b>Factoriser A</b> $A = 5x + 40$	
<u>exercice 2:</u>	<b>Factoriser B</b> $B = (x + 4)(x - 1) + (x + 4)(x - 2)$	
<u>exercice 3:</u>	<b>Factoriser C</b> $C = 5x + 7x$	
<u>exercice 4:</u>	<b>Factoriser D</b> $D = (2y + 4)(3x - 1) + (2x + 8)(2y + 4)$	
<u>exercice 5:</u>	<b>Factoriser E</b> $E = 10y - 20$	
<u>exercice 6:</u>	<b>Factoriser F</b> $F = (2x + 7)(4x - 12) - (2x + 7)(x + 10)$	
<u>exercice 7:</u>	<b>Factoriser G</b> $G = 3y^2 + 6y$	
<u>exercice 8:</u>	<b>Factoriser H</b> $H = (y + 75)(9x + 75) - (y + 75)(x - 5)$	
<u>exercice 9:</u>	<b>Factoriser I</b> $I = 25y^3 + 5y^2 - 15y$	
<u>exercice 10:</u>	<b>Factoriser J</b> $J = (x + 1)^2 - 4(x + 1)$	

3 <sup>e</sup> corrections	Fiche compétences Alg chapitre 1	Littéral 2 (N42)
<u>exercice 1:</u>	$A = 5x + 40$ $= 5 \times x + 5 \times 8$ $= 5(x + 8)$	
<u>exercice 2:</u>	$B = (x + 4)(x - 1) + (x + 4)(x - 2)$ $= (x + 4)[(x - 1) + (x - 2)]$ $= (x + 4)[x - 1 + x - 2]$ $= (x + 4)(2x - 3)$	
<u>exercice 3:</u>	$C = 5x + 7x$ $= x(5 + 7)$ $= 12x$	
<u>exercice 4:</u>	$D = (2y + 4)(3x - 1) + (2x + 8)(2y + 4)$ $= (2y + 4)[(3x - 1) + (2x + 8)]$ $= (2y + 4)[3x - 1 + 2x + 8]$ $= (2y + 4)(5x + 7)$	
<u>exercice 5:</u>	$E = 10y - 20$ $= 10 \times y - 10 \times 2$ $= 10(y - 2)$	
<u>exercice 6:</u>	$F = (2x + 7)(4x - 12) - (2x + 7)(x + 10)$ $= (2x + 7)[(4x - 12) - (x + 10)]$ $= (2x + 7)[4x - 12 - x - 10]$ $= (2x + 7)(3x - 22)$	
<u>exercice 7:</u>	$G = 3y^2 + 6y$ $= 3y \times y + 3y \times 2$ $= 3y(y + 2)$	
<u>exercice 8:</u>	$H = (y + 75)(9x + 75) - (y + 75)(x - 5)$ $= (y + 75)[(9x + 75) - (x - 5)]$ $= (y + 75)[9x + 75 - x + 5]$ $= (y + 75)(8x + 80)$	
<u>exercice 9:</u>	$I = 25y^3 + 5y^2 - 15y$ $= 5y \times 5y^2 + 5y \times y - 5y \times 3$ $= 5y(5y^2 + y - 3)$	

**exercice 10:**

$$\begin{aligned} J &= (x + 1)^2 - 4(x + 1) \\ &= (x + 1) [(x + 1) - 4] \\ &= (x + 1) [x + 1 - 4] \\ &= (x + 1)(x - 3) \end{aligned}$$