AP Maths — Relatifs (3) + triangles

Exercice 1

Calculer.

$A = -8 \times (-1 + 1)$

$B = -2 \times (-26 + 22) \times (-4)$

$C = 5 - (-5 + 5)$

$D = 5 \times (-3) \times (-26 + 24)$

$E = -10 - 4 \times (-8)$

$F = -8 \times (20 \div 4 + 5)$

$G = (-2 + 1) \times (-5)$

$H = 4 \times 3 \div (6 - 12)$

$I = (-9 - 19) \div 4$

$J = 2 - (+2) - 10$

Exercice 2

Calculer.

$A = 4 \times (-4) + (-3) \times (-1,5)$

$B = -5 \times 1,5 - (-5) \times 5$

$C = 2 - \Big(-5,5 + \big(2 - (-2) \times (-1)\big)\Big)$

$D = -4 \times \Big(3 \times \big(2 + 5 \times (-5) + 5\big) - (-10)\Big) + 2$

$E = 2 \times \big(4 + (-4) \times (-5)\big)$

$F = 5 \times \big(-10 - 3 \times (5 + 2)\big)$

$G = 2 \times \big(1,5 + (-3,5)\big) - (2 + 4) \times (-5,5)$

$H = -\dfrac{5}{2} + (-2) \times (-4) - 4$

$I = 6 - \big(3 + (-4 - 3)\big)$

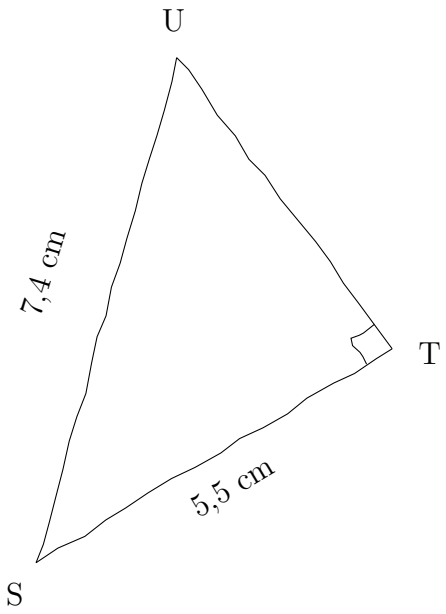
$J = 11 - \Big(-4 + \big(-5 - (-7)\big)\Big)$

Exercice 3

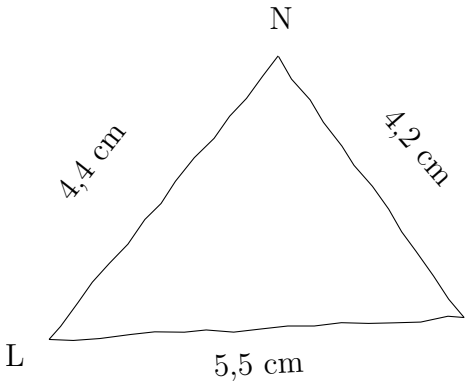
Les triangles ci-dessous ont été réalisés à main levée, sans respecter les dimensions.
Construire ces triangles en respectant les informations indiquées.

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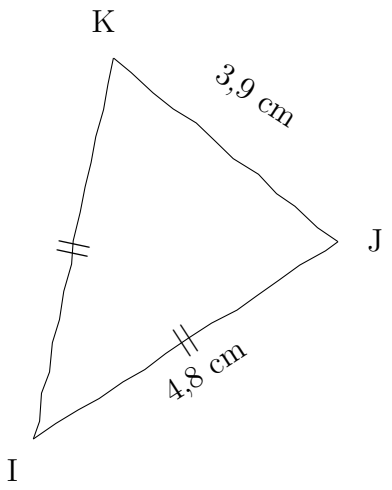
1.



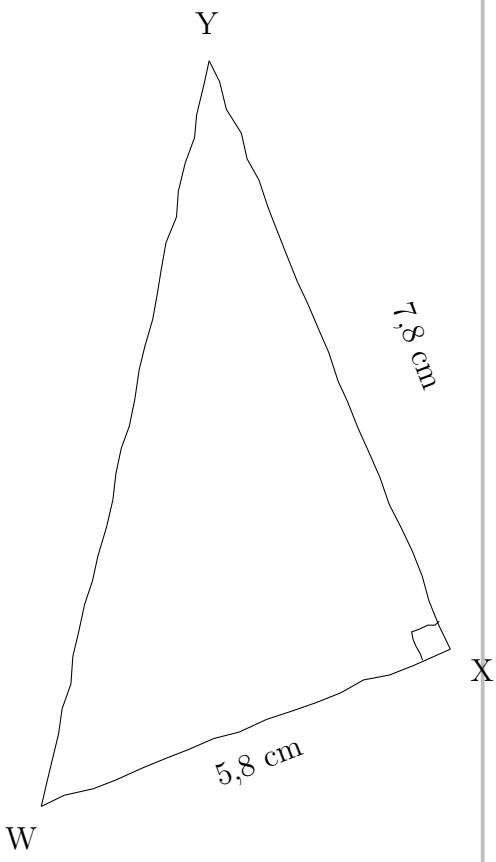
2.



3.



4.



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AP Maths (Correction) — Relatifs (3) + triangles

Corrigé de l'exercice 1

$A = -8 \times (\mathbf{-1+1})$
$A = -8 \times 0$
$A = \mathbf{0}$

$B = -2 \times (\mathbf{-26+22}) \times (-4)$
$B = -2 \times (-4) \times (-4)$
$B = \mathbf{-32}$

$C = 5 - (\mathbf{-5+5})$
$C = 5 - (+0)$
$C = 5 + 0$
$C = \mathbf{5}$

$D = 5 \times (-3) \times (\mathbf{-26+24})$
$D = 5 \times (-3) \times (-2)$
$D = \mathbf{30}$

$E = -10 \ \mathbf{-4 \times (-8)}$
$E = -10 + 32$
$E = \mathbf{22}$

$F = -8 \times (\mathbf{20 \div 4} + 5)$
$F = -8 \times (\mathbf{5+5})$
$F = -8 \times 10$
$F = \mathbf{-80}$

$G = (\mathbf{-2+1}) \times (-5)$
$G = -1 \times (-5)$
$G = \mathbf{5}$

$H = 4 \times 3 \div (\mathbf{6-12})$
$H = \mathbf{4 \times 3} \div (-6)$
$H = 12 \div (-6)$
$H = \mathbf{-2}$

$I = (\mathbf{-9-19}) \div 4$
$I = -28 \div 4$
$I = \mathbf{-7}$

$J = 2\mathbf{-2} - 10$
$J = 0 - 10$
$J = \mathbf{-10}$

Corrigé de l'exercice 2

$A = \mathbf{4 \times (-4)} + \mathbf{(-3) \times (-1,5)}$
$A = -16 + 4,5$
$A = \mathbf{-11,5}$

$B = \mathbf{-5 \times 1,5 - (-5) \times 5}$
$B = -7,5 - (-25)$
$B = -7,5 + 25$
$B = \mathbf{17,5}$

$C = 2 - \left(-5,5 + \left(2 - \mathbf{(-2) \times (-1)}\right)\right)$
$C = 2 - \left(-5,5 + (\mathbf{2-2})\right)$
$C = 2 - (\mathbf{-5,5+0})$
$C = 2 - (-5,5)$
$C = 2 + 5,5$
$C = \mathbf{7,5}$

$D = -4 \times \left(3 \times \left(2 + \mathbf{5 \times (-5)} + 5\right) - (-10)\right) + 2$

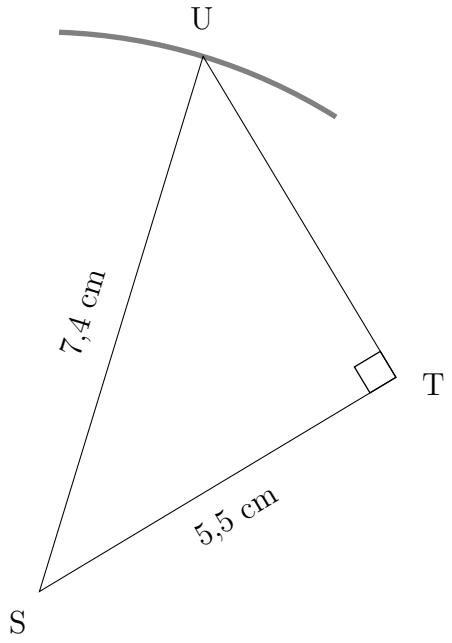
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$D = -4 \times \left(3 \times \left(\mathbf{2 + (-25) + 5}\right) - (-10)\right) + 2$
$D = -4 \times \left(\mathbf{3 \times (-18)} - (-10)\right) + 2$
$D = -4 \times \left(\mathbf{-54 - (-10)}\right) + 2$
$D = -4 \times (\mathbf{-54 + 10}) + 2$
$D = \mathbf{-4 \times (-44)} + 2$
$D = 176 + 2$
$D = \mathbf{178}$
$E = 2 \times \left(4 + \mathbf{(-4) \times (-5)}\right)$
$E = 2 \times (\mathbf{4 + 20})$
$E = 2 \times 24$
$E = \mathbf{48}$
$F = 5 \times \left(-10 - 3 \times (\mathbf{5 + 2})\right)$
$F = 5 \times (-10 - \mathbf{3 \times 7})$
$F = 5 \times (\mathbf{-10 - 21})$
$F = 5 \times (-31)$
$F = \mathbf{-155}$
$G = 2 \times \left(\mathbf{1,5 + (-3,5)}\right) - (\mathbf{2 + 4}) \times (-5,5)$
$G = \mathbf{2 \times (-2) - 6 \times (-5,5)}$
$G = -4 - (-33)$
$G = \mathbf{29}$
$H = -\dfrac{5}{2} + \mathbf{(-2) \times (-4)} - 4$
$H = \mathbf{-\dfrac{5}{2} + 8} - 4$
$H = \mathbf{-2,5 + 8} - 4$
$H = 5.5 - 4$
$H = \mathbf{1,5}$
$I = 6 - \left(3 + \mathbf{(-4 - 3)}\right)$
$I = 6 - \left(\mathbf{3 + (-7)}\right)$
$I = 6 - (-4)$
$I = 6 + 4$
$I = \mathbf{10}$
$J = 11 - \left(-4 + \left(\mathbf{-5 - (-7)}\right)\right)$
$J = 11 - \left(-4 + (\mathbf{-5 + 7})\right)$
$J = 11 - (\mathbf{-4 + 2})$
$J = 11 - (-2)$
$J = 11 + 2$
$J = \mathbf{13}$

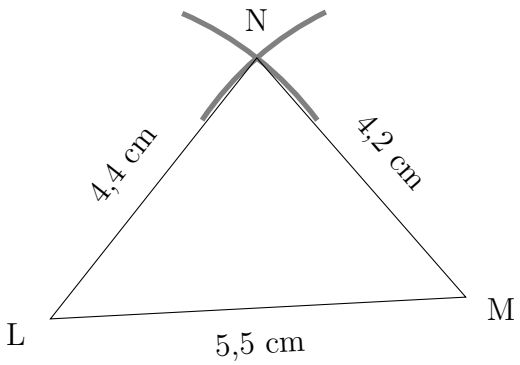
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Corrigé de l'exercice 3

1. Pour cette construction, nous avons utilisé la règle graduée, l'équerre et le compas.

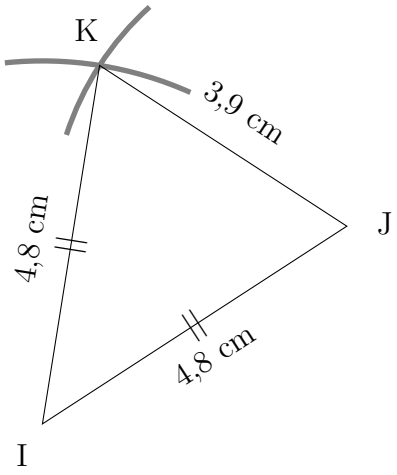


2. Pour cette construction, nous avons utilisé le compas et la règle graduée.

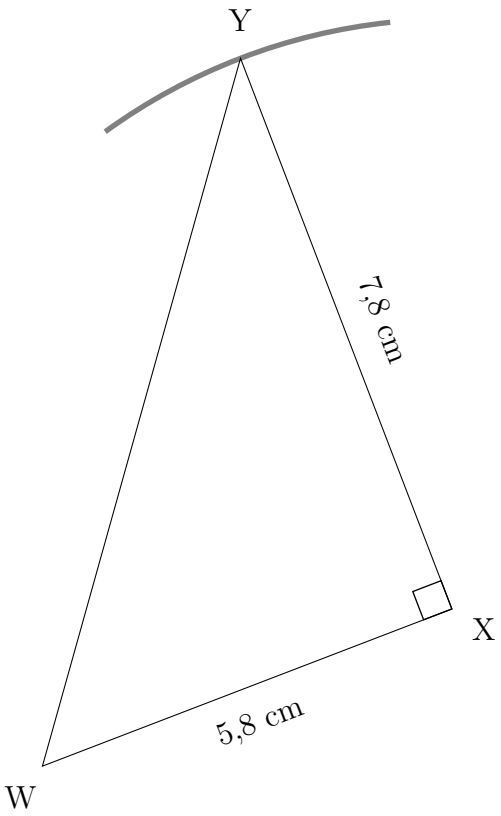


3. Pour cette construction, nous avons utilisé le compas et la règle graduée.

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4. Pour cette construction, nous avons utilisé la règle graduée, l'équerre et le compas.



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