

Correction Devoir

exercice 1:

$$\begin{aligned} A &= -8 \times 12 + (1 + (-8) \div 2) \\ &= -8 \times 12 + (1 + (-4)) \\ &= -8 \times 12 + (-3) \\ &= -96 + (-3) \\ &= -99 \end{aligned}$$

$$D = - \underbrace{0,2 \times 8}_{\substack{0,2 \times 8 \\ = 1,6}} \times (-5) \times (-7) \times 0,1$$

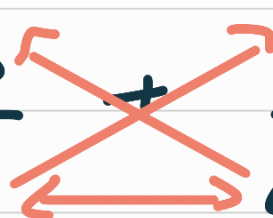
$$= - \underbrace{1,6 \times (-5)}_{\substack{3 \\ 16 \\ \times 5 \\ \hline 80}} \times (-7) \times 0,1$$

$$= 8 \times (-7) \times 0,1$$

$$= -56 \times 0,1$$

$$= -5,6$$

exercice 2 :

$$E = \frac{3}{4} + \frac{5}{6}$$


$$= \frac{3 \times 6 + 4 \times 5}{4 \times 6}$$

$$= \frac{18 + 20}{24}$$

$$= \frac{38}{24}$$

$$= \frac{\cancel{2} \times 19}{\cancel{2} \times 12} = \frac{19}{12}.$$

$$F = -\frac{13}{52} = -\frac{\cancel{13} \times 1}{\cancel{13} \times 4} = -\frac{1}{4}$$

$$G = \frac{14}{40} = \frac{\cancel{2} \times 7}{\cancel{2} \times 20} = \frac{7}{20}$$

$$E, \frac{14 \times 35}{50 \times 28} = \frac{\cancel{2} \times \cancel{7} \times \cancel{5} \times 7}{\cancel{5} \times \cancel{2} \times 5 \times \cancel{2} \times \cancel{7} \times 20} = \frac{7}{20}$$

$$H = \frac{16}{3} - \frac{2 \times 3}{3}$$

$$= \frac{16}{3} - \frac{6}{3}$$

$$= \frac{16-6}{3}$$

$$= \frac{10}{3}$$

exercice 5:

1) Faux, par exemple $18 + (-9)$
 $= 9 > 0$

4) Faux, par exemple on a :

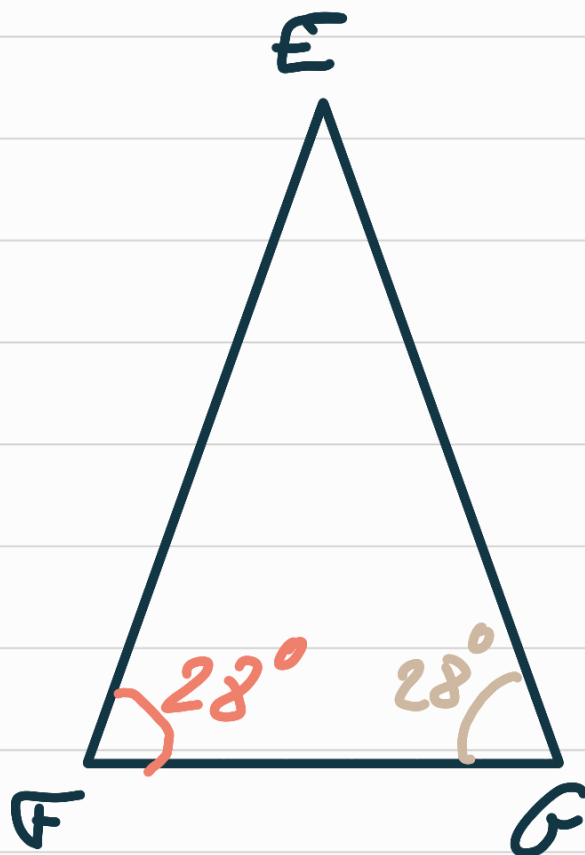
$$(-4) \times 10 = -40$$

$$(-4) + 10 = 6$$

$$\text{et } -40 < 6$$

Exercices

exercice 2:



Comme le triangle EFG doit être isocèle en E, alors

$$\widehat{FGE} = \widehat{EFG} = 28^\circ.$$

• De plus, comme la somme des angles d'un triangle vaut 180° , alors :

$$\begin{aligned}\widehat{FEG} &= 180 - (28 + 28) \\ &= 180 - 56 \\ &= 124^\circ.\end{aligned}$$

exercice : Fractions

$$\bullet \quad \frac{2}{5} + \frac{4}{3}$$

$$= \frac{2 \times 3 + 4 \times 5}{5 \times 3}$$

$$= \frac{6 + 20}{15}$$

$$= \frac{26}{15}$$

$$\bullet \quad 1 - \frac{12}{23}$$

$$= \frac{1 \times 23}{23} - \frac{12}{23}$$

$$= \frac{23}{23} - \frac{12}{23}$$

$$= \frac{11}{23}.$$

$$\bullet \quad \frac{3}{\textcircled{15}} + \frac{8}{5}$$

5×3

$$= \frac{3 \times 5 + 8 \times 15}{15 \times 5}$$

$$= \frac{15 + 120}{75}$$

$$= \frac{135}{75}$$

$$= \frac{\cancel{5} \times \cancel{3} \times 3 \times 3}{\cancel{5} \times 5 \times \cancel{3}}$$

$$= \frac{9}{5}$$

$$\frac{3}{15} + \frac{8 \times 3}{5 \times 3}$$

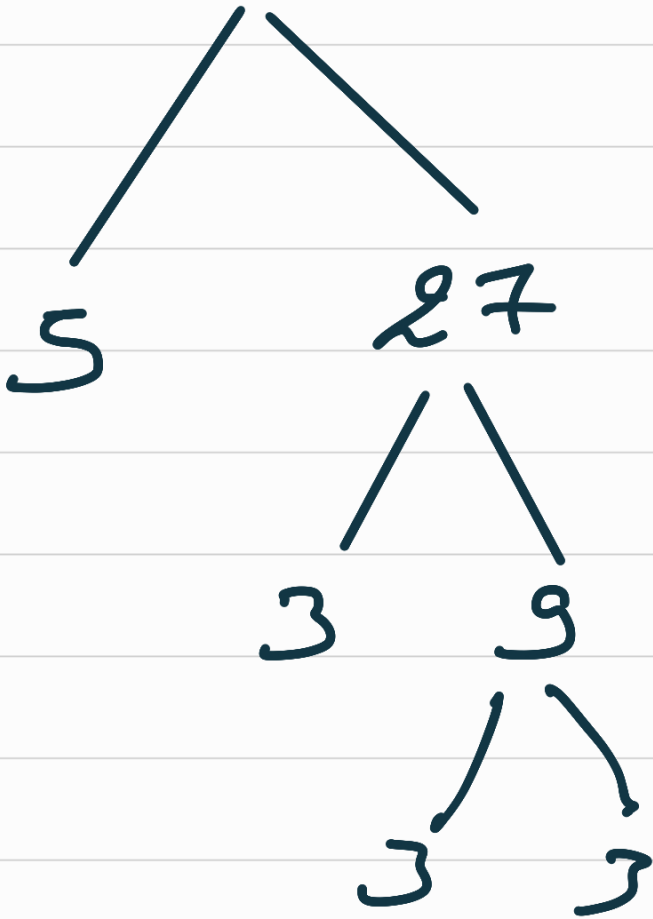
$$= \frac{3}{15} + \frac{24}{15}$$

$$= \frac{27}{15}$$

$$= \frac{\cancel{3} \times 3 \times 3}{3 \times 5}$$

$$= \frac{9}{5}$$

125



75

