

Autour des rapports de longueur

Activité 1 : Compléter sachant que $AB = 6$; $AC = 9$; $BC = 10$ et $AE = 2$ (on donnera le résultat sous forme d'une fraction irréductible).

$$\frac{AB}{AC} = \dots \quad \frac{AC}{AE} = \dots \quad \frac{BA}{BC} = \dots \quad \frac{CB}{CA} = \dots \quad \frac{AE}{AB} = \dots$$

Activité 2 : Compléter en se référant aux illustrations.

	$\frac{AM}{AB} =$ $\frac{MA}{MB} =$
	$\frac{BM}{BA} =$ $\frac{MA}{MB} =$
	$\frac{AM}{AB} =$ $\frac{MA}{MB} =$
	$\frac{AB}{AM} =$ $\frac{MA}{MB} =$
	$\frac{CD}{CE} =$ $\frac{DC}{DE} =$
	$\frac{HG}{HF} =$ $\frac{GF}{GH} =$
	$\frac{IK}{IJ} =$ $\frac{KI}{KJ} =$
	$\frac{LM}{LN} =$ $\frac{NM}{NL} =$

Activité 3 : Placer les points M (pour les 4 premiers), E, F, J et N **sur le segment** proposé.

	$\frac{AM}{AB} = \frac{11}{12}$
	$\frac{BM}{BA} = \frac{2}{5}$
	$\frac{AM}{AB} = \frac{25}{24}$
	$\frac{MA}{MB} = \frac{1}{5}$
	$\frac{CE}{CD} = \frac{3}{5}$
	$\frac{EF}{EG} = \frac{7}{8}$
	$\frac{IH}{IJ} = \frac{4}{3}$
	$\frac{NL}{NK} = \frac{7}{4}$

Activité 4 : Déterminer la longueur du segment sachant que :

$$1) \frac{AB}{3} = 7 \quad 2) \frac{CD}{15} = \frac{7}{3} \quad 3) \frac{3}{4} = \frac{EF}{16} \quad 4) \frac{8}{GH} = \frac{2}{5} \quad 5) \frac{IJ}{4,2} = \frac{4,2}{3,6}$$

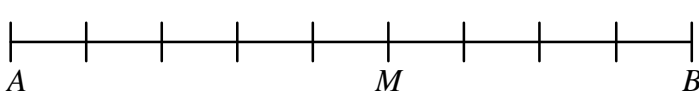
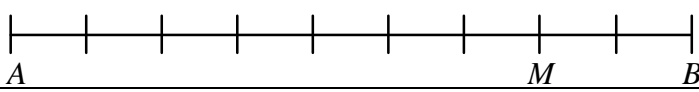
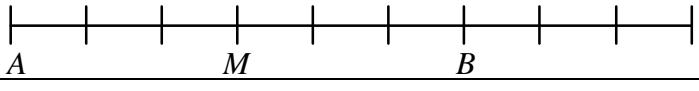
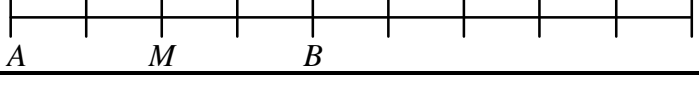
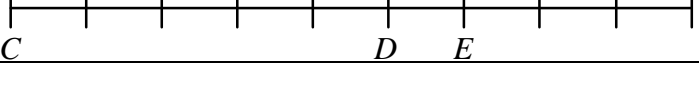
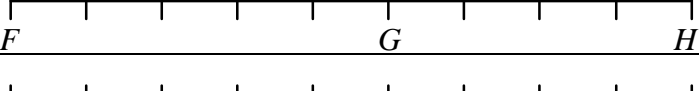

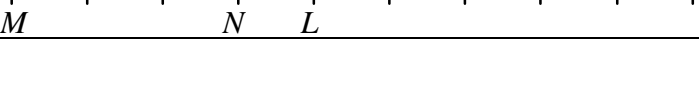
$$6) \frac{85}{KL} = \frac{17}{3} \quad 7) \frac{MN-5}{3} = 8 \quad 8) \frac{OP+2}{28} = \frac{3}{12} \quad 9) \frac{QR-6}{QR} = \frac{5}{7} \quad 10) \frac{ST}{ST+3} = \frac{5}{6}$$

Autour des rapports de longueur (Correction)

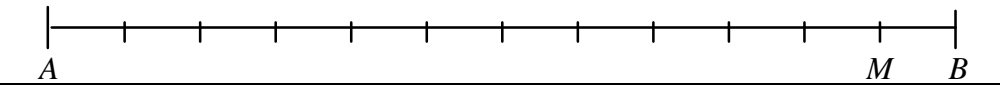
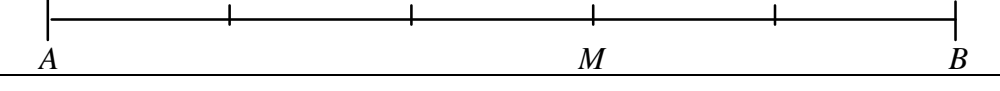
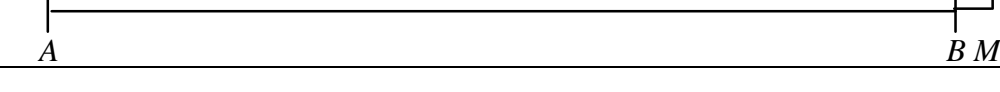

Activité 1 : Compléter sachant que $AB = 6$; $AC = 9$; $BC = 10$ et $AE = 2$ (on donnera le résultat sous forme d'une fraction irréductible).

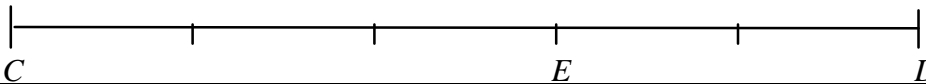
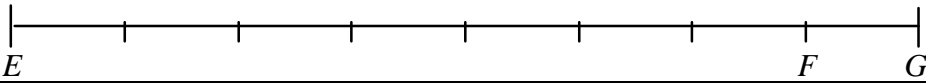
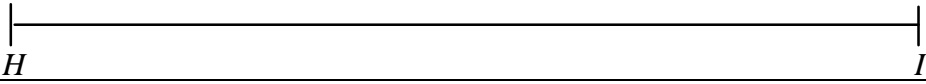
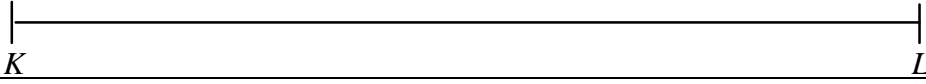
$$\frac{AB}{AC} = \frac{6}{9} = \frac{2}{3} \quad \frac{AC}{AE} = \frac{9}{2} \quad \frac{BA}{BC} = \frac{6}{10} = \frac{3}{5} \quad \frac{CB}{CA} = \frac{10}{9} \quad \frac{AE}{AB} = \frac{2}{6} = \frac{1}{3}$$

Activité 2 : Compléter en se référant aux illustrations.

	$\frac{AM}{AB} = \frac{5}{9}$	$\frac{MA}{MB} = \frac{5}{4}$
	$\frac{BM}{BA} = \frac{2}{9}$	$\frac{MA}{MB} = \frac{7}{2}$
	$\frac{AM}{AB} = \frac{3}{6} = \frac{1}{2}$	$\frac{MA}{MB} = \frac{3}{3} = 1$
	$\frac{AB}{AM} = \frac{6}{4} = \frac{3}{2}$	$\frac{MA}{MB} = \frac{2}{2} = 1$
	$\frac{CD}{CE} = \frac{5}{6}$	$\frac{DC}{DE} = \frac{5}{1} = 5$
	$\frac{HG}{HF} = \frac{4}{9}$	$\frac{GF}{GH} = \frac{5}{4}$
	$\frac{IK}{IJ} = \frac{2}{7}$	$\frac{KI}{KJ} = \frac{2}{5}$
	$\frac{LM}{LN} = \frac{4}{1} = 4$	$\frac{NM}{NL} = \frac{3}{1} = 3$

Activité 3 : Placer les points M (pour les 4 premiers), E, F, J et N sur le segment proposé.

	$\frac{AM}{AB} = \frac{11}{12}$
	$\frac{BM}{BA} = \frac{2}{5}$
	$\frac{AM}{AB} = \frac{25}{24}$
	$\frac{MA}{MB} = \frac{1}{5}$

	$\frac{CE}{CD} = \frac{3}{5}$
	$\frac{EF}{EG} = \frac{7}{8}$
	$\frac{IJ}{HI} = \frac{4}{3}$
	$\frac{NL}{NK} = \frac{7}{4}$

Activité 4 : Déterminer la longueur du segment sachant que :

- 1) $\frac{AB}{3} = 7$ 2) $\frac{CD}{15} = \frac{7}{3}$ 3) $\frac{3}{4} = \frac{EF}{16}$ 4) $\frac{8}{GH} = \frac{2}{5}$ 5) $\frac{IJ}{4,2} = \frac{4,2}{3,6}$
- 6) $\frac{85}{KL} = \frac{17}{3}$ 7) $\frac{MN-5}{3} = 8$ 8) $\frac{OP+2}{28} = \frac{3}{12}$ 9) $\frac{QR-6}{QR} = \frac{5}{7}$ 10) $\frac{ST}{ST+3} = \frac{5}{6}$