CM1 Mathématiques : numération Mnum L8 p *1 / 3*

L 8 Repérer, placer et encadrer des fractions simples sur une demi-droite graduée

CORRECTION 1er

*Cherchons*

Lors du cours de sport, chaque enfant devait parcourir la plus grande distance en 30 secondes. Voici leurs résultats:



1 / Où placerais-tu le résultat de chaque enfant sur la droite?

2 / Qui serait en 1er, 2ème, et 3ème place sur un podium?

Aide

Pour répondre à cet exercice, il faut à chaque fois partager l’unité en part égale eu fonction du dénominateur de la fraction. Travailler sur le schéma comme ci-dessous.

1 / Où placerais-tu le résultat de chaque enfant sur la droite?

Pour Sacha $\frac{1}{2}$ de u, il faut donc partager u qui correspond à 12 carreaux en 2 parts égales soit tous les 6 carreaux.

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Pour Justine $\frac{3}{4}$ de u et Moussa $\frac{1}{4}$ de u il faut donc partager u qui correspond à 12 carreaux en 4 parts égales soit tous les 3 carreaux.

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|  |  |  | $$\frac{1}{4}$$ |  | $$\frac{2}{4}$$ |  | $$\frac{3}{4}$$ |  | $$\frac{4}{4}$$ |  | $$\frac{5}{4}$$ |  | $$\frac{6}{4}$$ |  | $$\frac{7}{4}$$ |  | $$\frac{8}{4}$$ |

Pour Ernesto $\frac{2}{3}$ de u et Aurélia $\frac{5}{3}$ de u il faut donc partager u qui correspond à 12 carreaux en 3 parts égales soit tous les 4 carreaux.

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|  |  |  |  | $$\frac{1}{3}$$ |  |  | $$\frac{2}{3}$$ |  |  | $$\frac{3}{3}$$ |  |  | $$\frac{4}{3}$$ |  |  | $$\frac{5}{3}$$ |  |  | $$\frac{6}{3}$$ |

2 / Qui serait en 1er, 2ème, et 3ème place sur un podium?

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| 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 2 |
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|  |  |  |  |  |  | $$\frac{1}{2}$$ |  |  |  |  | $$\frac{2}{2}$$ |  |  |  |  | $$\frac{3}{2}$$ |  |  |  |  | $$\frac{4}{2}$$ |
| 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 2 |
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|  |  |  | $$\frac{1}{4}$$ |  | $$\frac{2}{4}$$ |  | $$\frac{3}{4}$$ |  | $$\frac{4}{4}$$ |  | $$\frac{5}{4}$$ |  | $$\frac{6}{4}$$ |  | $$\frac{7}{4}$$ |  | $$\frac{8}{4}$$ |
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|  |  |  |  | $$\frac{1}{3}$$ |  |  | $$\frac{2}{3}$$ |  |  | $$\frac{3}{3}$$ |  |  | $$\frac{4}{3}$$ |  |  | $$\frac{5}{3}$$ |  |  | $$\frac{6}{3}$$ |

En 1er place Aurélia $\frac{5}{3}$ 2ème place Justine $\frac{3}{4}$ 3ème place Ernesto $\frac{2}{3}$

*Repérer une fraction sur une demi-droite graduée*

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| **☺ Exercice 1 : Observe** la demi-droite graduée et **associe** les lettres aux fractions proposées. | Correction On a partagé l’unité en 10 parts égales.

|  |  |  |
| --- | --- | --- |
| A 🡪 $\frac{3}{10}$  | B 🡪 $\frac{5}{10}$  | C 🡪 $\frac{10}{10}$  |
| D 🡪 $\frac{13}{10}$  | E 🡪 $\frac{15}{10}$  | F 🡪 $\frac{20}{10}$  |

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| **😐 Exercice 2 :** **Observe** les demi-droites graduées et **indique** à quelle fraction correspond chaque lettre. | Correction On a partagé l’unité en 4 parts égales.

|  |  |  |
| --- | --- | --- |
| A 🡪 $\frac{1}{4}$  | B 🡪 $\frac{3}{4}$  | C 🡪 $\frac{5}{4}$  |
| D 🡪 $\frac{6}{4}$  |  |  |

On a partagé l’unité en 3 parts égales.

|  |  |  |
| --- | --- | --- |
| A 🡪 $\frac{2}{3}$  | B 🡪 $\frac{5}{3}$  | C 🡪 $\frac{9}{3}$  |
| D 🡪 $\frac{10}{3}$  | E 🡪 $\frac{14}{3}$  |  |

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*Placer une fraction sur une demi-droite -graduée*

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| **☺ Exercice 3 : Reproduis** les demi -droites graduées et **place** les fractions suivantes. | a On a partagé l’unité en 8 parts égales, le dénominateur de la fraction sera égal à 8.

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|  | u |  |  |
| 0 |  |  |  |  |  |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | $$\frac{1}{8}$$ | $$\frac{3}{8}$$ |  | $$\frac{6}{8}$$ | $$\frac{8}{8}$$ |  |
|  |  |  |  | $$\frac{4}{8}$$ |  |  |  |  |

b On a partagé l’unité en 3 parts égales, le dénominateur de la fraction sera égal à 3.

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| --- | --- | --- |
|  | u |  |
| 0 |  | 1 |  | 2 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | $$\frac{1}{3}$$ | $$\frac{3}{3}$$ |  | $$\frac{6}{3}$$ |
|  |  |  |  | $$\frac{4}{3}$$ |  |  |

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| **😐 Exercice 4 :** 1 / **Reproduis** la demi -droite graduée et **place** les fractions suivantes.2 / **Observe** la demi-droite-graduée et **recopie** ce qui est vrai. | 1 On a partagé l’unité en 5 parts égales, le dénominateur de la fraction sera égal à 5.

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|  | u |  |  |  |  |  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 2 |
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|  |  | $$\frac{1}{5}$$ |  |  | $$\frac{3}{5}$$ |  |  | $$\frac{5}{5}$$ |  |  |  |  | $$\frac{8}{5}$$ |  |  | $$\frac{10}{5}$$ |

 2 Pour faire le 2, il faut regarder la droite graduée précédente. ***Voir schématisation en dessus***$\frac{8}{5}$ = 1 + $\frac{3}{5}$ vrai / $\frac{5}{5}$ = 5 faux 🡪= 1 / $\frac{10}{5}$ = 2 vrai / $\frac{1}{5}$ < 1 vrai $\frac{3}{5}$ > 1 faux

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| 0 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 2 |
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|  |  | $$\frac{1}{5}$$ |  |  | $$\frac{3}{5}$$ |  |  | $$\frac{5}{5}$$ |  |  |  |  | $$\frac{8}{5}$$ |  |  | $$\frac{10}{5}$$ |
| 0 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 2 |
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|  | 1 | $$\frac{3}{5}$$ |  |  |  |  |  |

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