Exercice :[mathssa.fr/classification](http://www.mathssa.fr/classification)

Quel est le plus petit ensemble de nombres auquel appartient chacun des nombres suivants ?

1) 2) 3) 4) 5) 6)

Méthode : Reconnaître la nature d’un nombre

[mathssa.fr/classification](http://www.mathssa.fr/classification)

Quel est le plus petit ensemble de nombres auquel appartient chacun des nombres suivants ?

1) 2) 3) 4) 5) 6)

**Correction**

1)

Donc ⅅ car le nombre de décimales après la virgule est en nombre fini.

2)

Donc car s’écrit uniquement sous forme d’une fraction et ne peut pas s’écrire sous forme décimale.

3) ⅅ car le nombre de décimales après la virgule est en nombre fini.

4)

Donc ℕ car est un nombre entier positif.

5)

Donc ℝ car c’est un nombre irrationnel.

Donc ⅅ car le nombre de décimales après la virgule est en nombre fini.

**Exercice sur les ensembles de nombres:**

Mettre une croix lorsque le nombre appartient à l’ensemble indiqué

1.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0,777 |  |  |  |  |  | -14,6 |  |  | 3,14159 |  |  |
| ∈ℕ |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℤ |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈D |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℚ |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℝ |  |  |  |  |  |  |  |  |  |  |  |  |

2.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | -10 | 10 | 4,555... | -1,44 |  |  |  |  | 51022,66 | 4110 | + |  |
| ∈ℕ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℤ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈D |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℚ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℝ |  |  |  |  |  |  |  |  |  |  |  |  |  |

3.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0 |  |  | - 104 |  | -675,94 |  | 10-9 | 4- | -x |  |  |  | - |  |
| ∈ℕ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℤ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℚ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℝ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 3,5 | 4,0 |  |  |  |  | 3,1 |  | - |  |  |  |  | 10 | 2,3535… | 0,123514527  89… |
| ∈ℕ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℤ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℚ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℝ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Correction des exercices sur les ensembles de nombres:**

1.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0,777 |  |  |  |  | =0,0001 | -14,6 | 98,5 | =10000000000 | 3,14159 | ==π  car π>0 |  |
| ∈ℕ |  |  |  |  |  |  |  |  | \* |  |  |  |
| ∈ℤ |  |  | \* |  |  |  |  |  | \* |  |  |  |
| ∈D | \* | \* | \* |  |  | \* | \* | \* | \* | \* |  |  |
| ∈ℚ | \* | \* | \* | \* |  | \* | \* | \* | \* | \* |  | \* |
| ∈ℝ | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* |

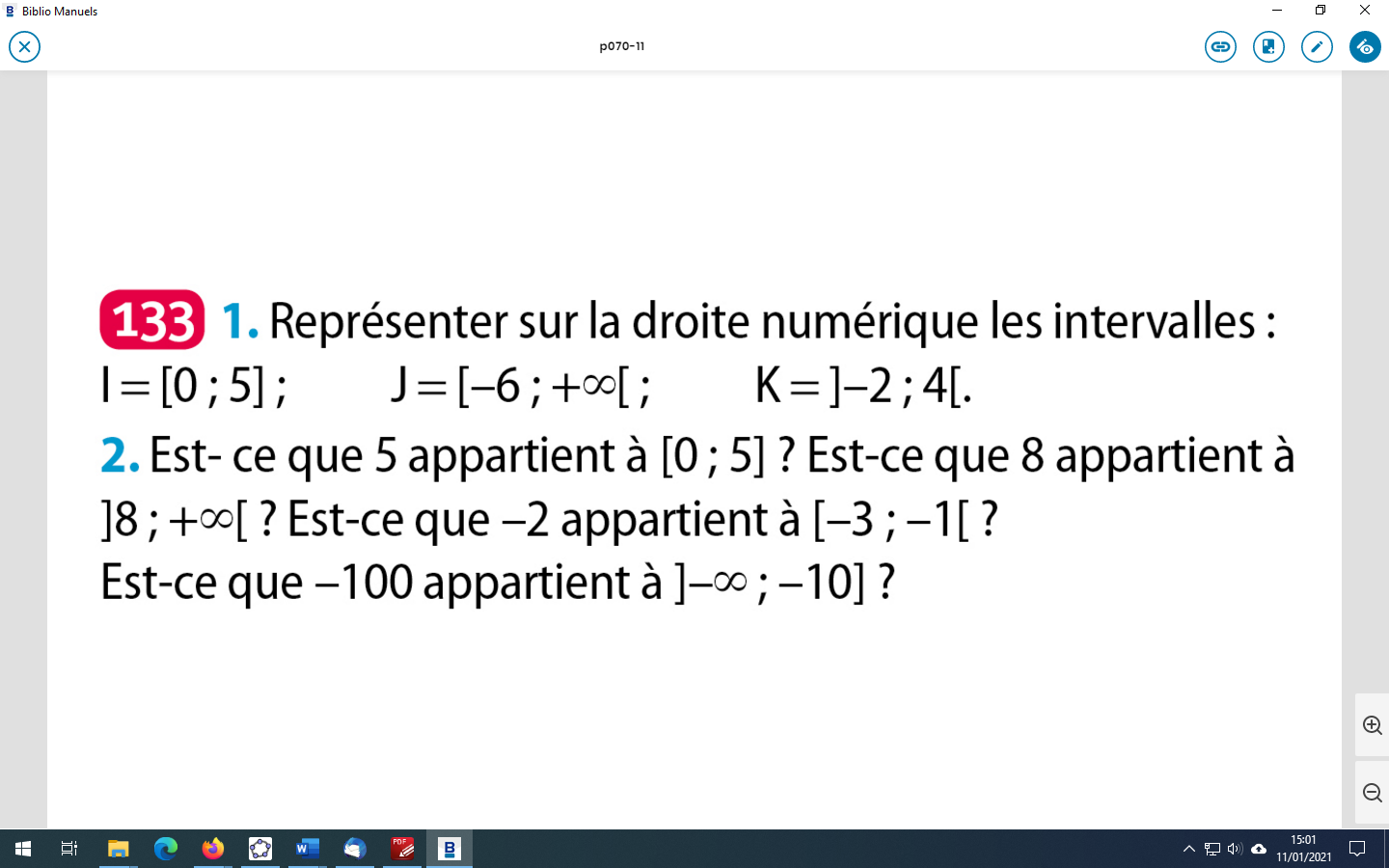
2.

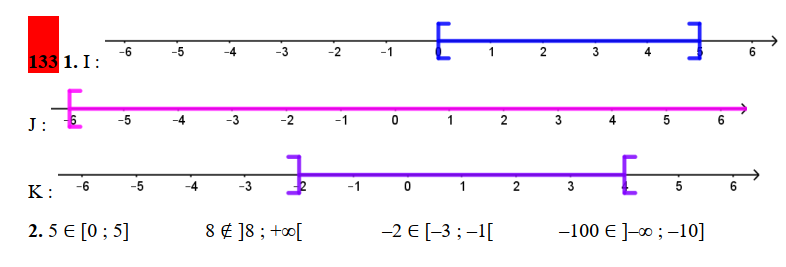
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | =10 | -10 | 10 | 4,555... | -1,44 |  |  |  |  | 51022,66 | 4110 | + |  |
| ∈ℕ | \* |  |  |  |  |  |  |  |  |  |  |  | \* |
| ∈ℤ | \* | \* |  |  |  | \* |  |  | \* |  |  |  | \* |
| ∈D | \* | \* | \* |  | \* | \* | \* |  | \* | \* | \* | \* | \* |
| ∈ℚ | \* | \* | \* | \* | \* | \* | \* |  | \* | \* | \* | \* | \* |
| ∈ℝ | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* |

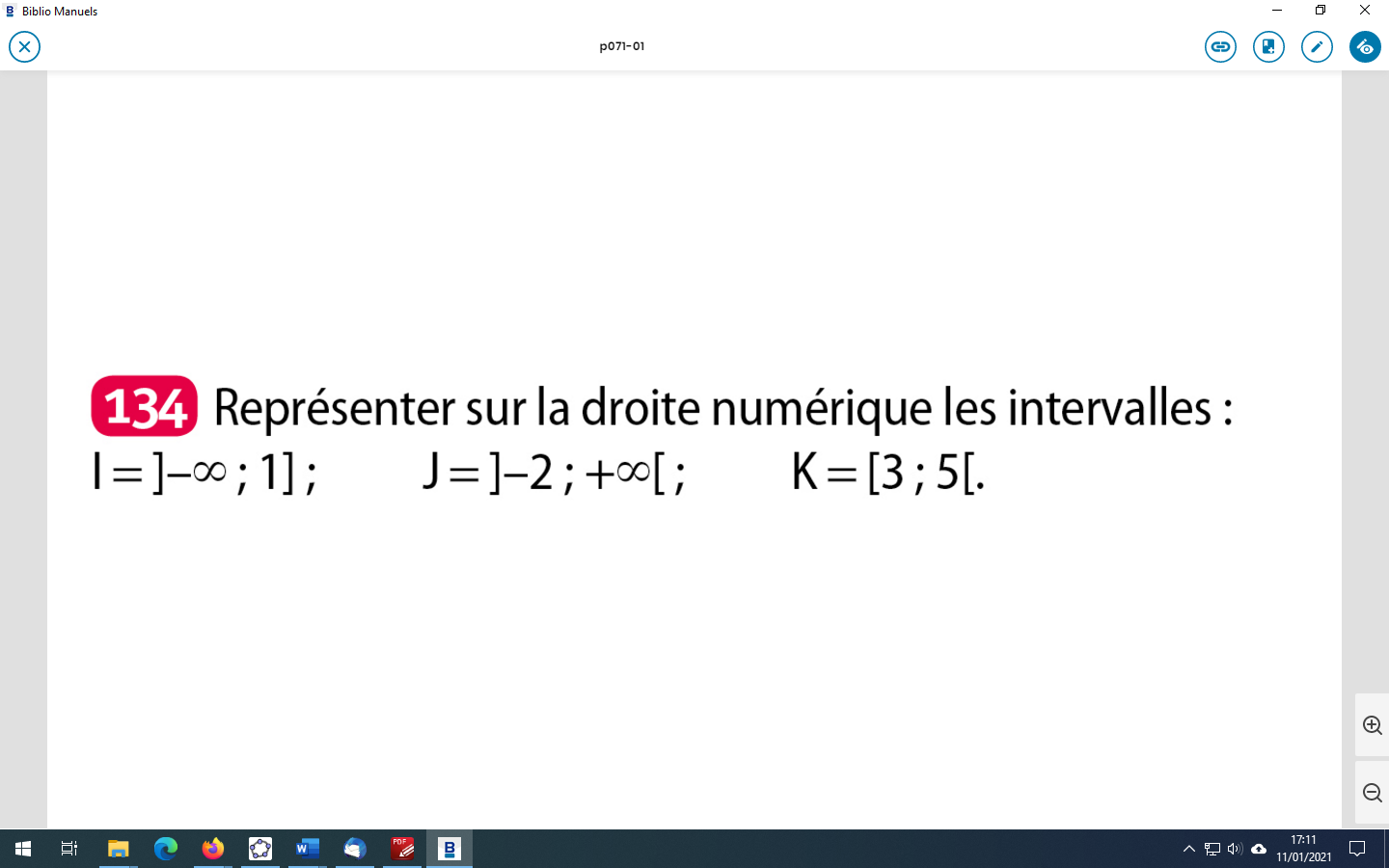
3.

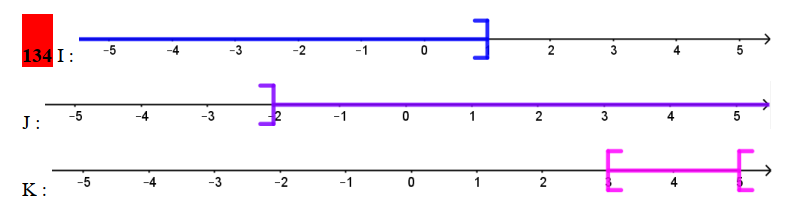
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0 |  |  | - 104 |  | -675,94 |  | 10-9 | 4- | -x |  |  |  | - |  |
| ∈ℕ | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ∈ℤ | \* |  |  | \* |  |  |  |  | \* | \* |  |  |  | \* |  |
| ∈D | \* | \* | \* | \* |  | \* |  | \* | \* | \* |  |  | \* | \* |  |
| ∈ℚ | \* | \* | \* | \* | \* | \* |  | \* | \* | \* |  | \* | \* | \* | \* |
| ∈ℝ | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* |

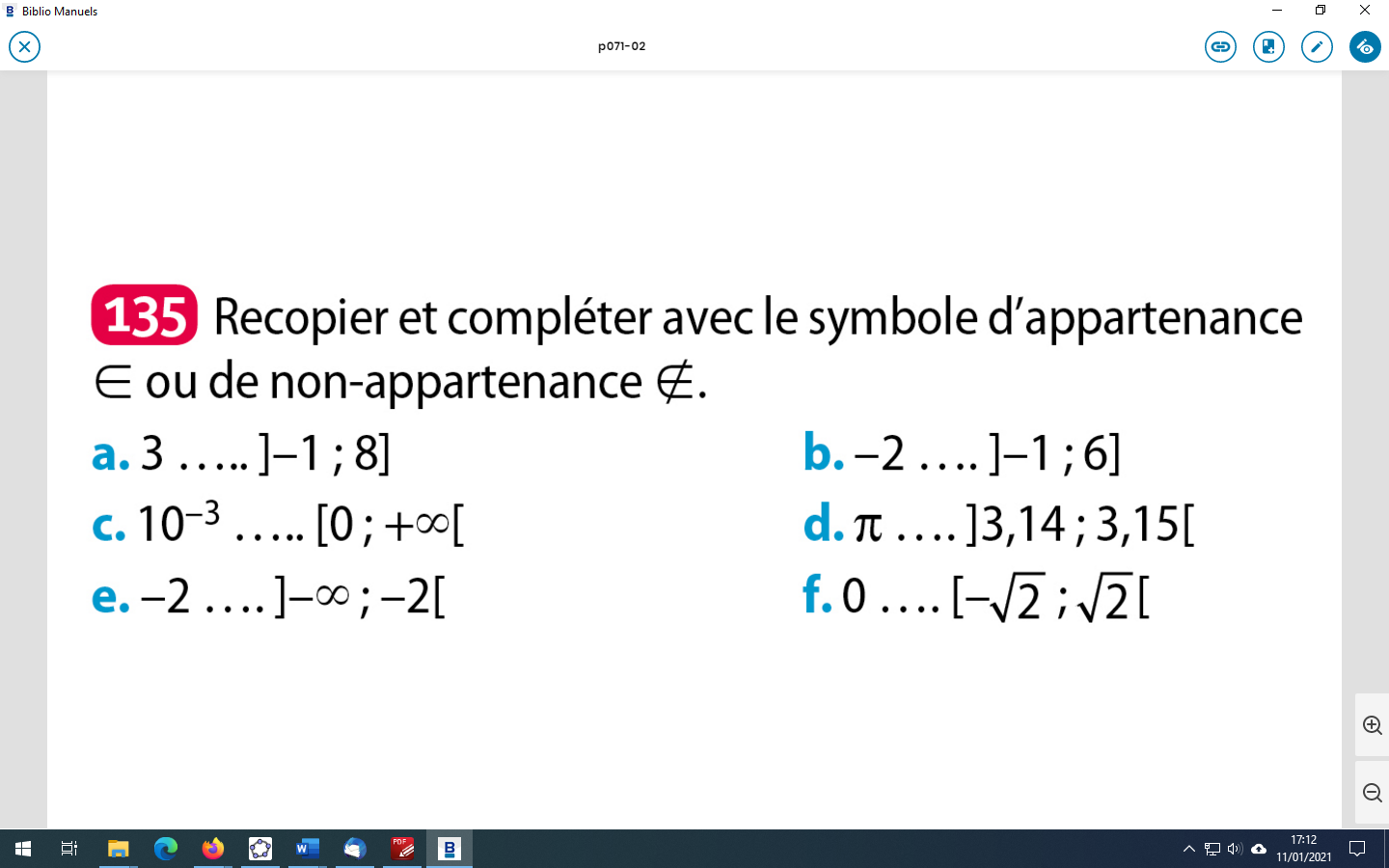
**Correction des exercices 133,134,135,136,137,138,139,140,141,142p70-71**











∉

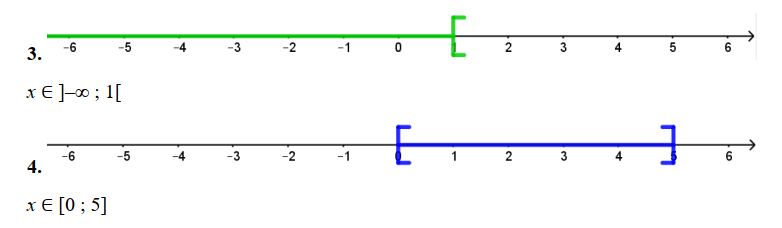
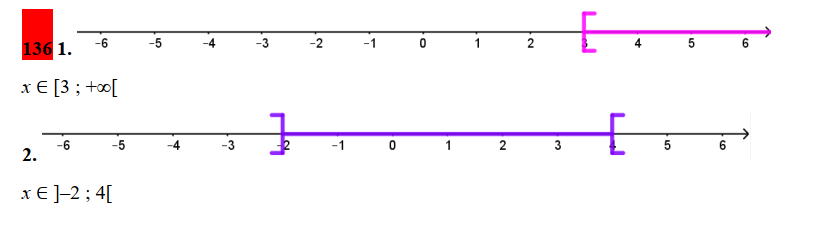
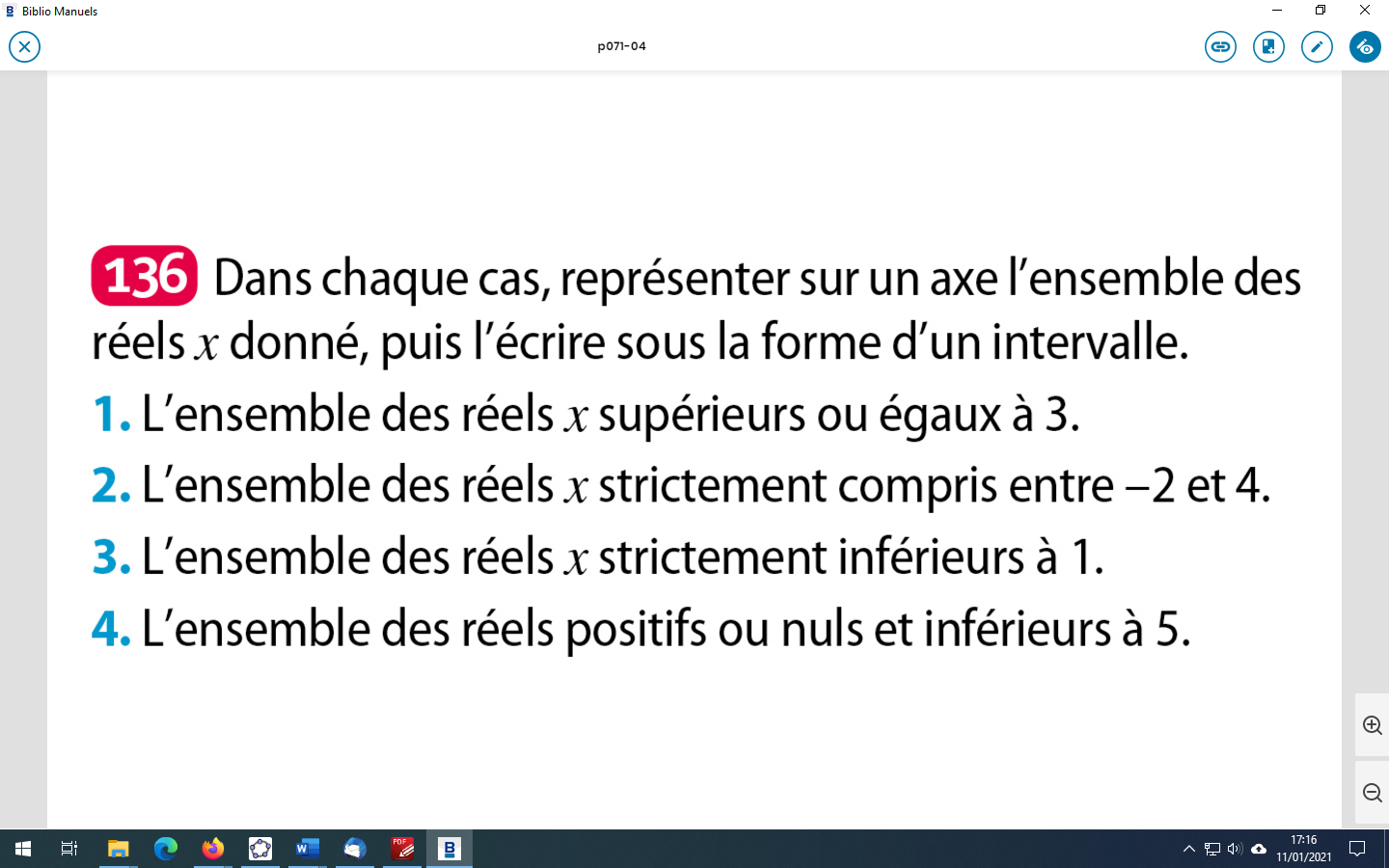
∉

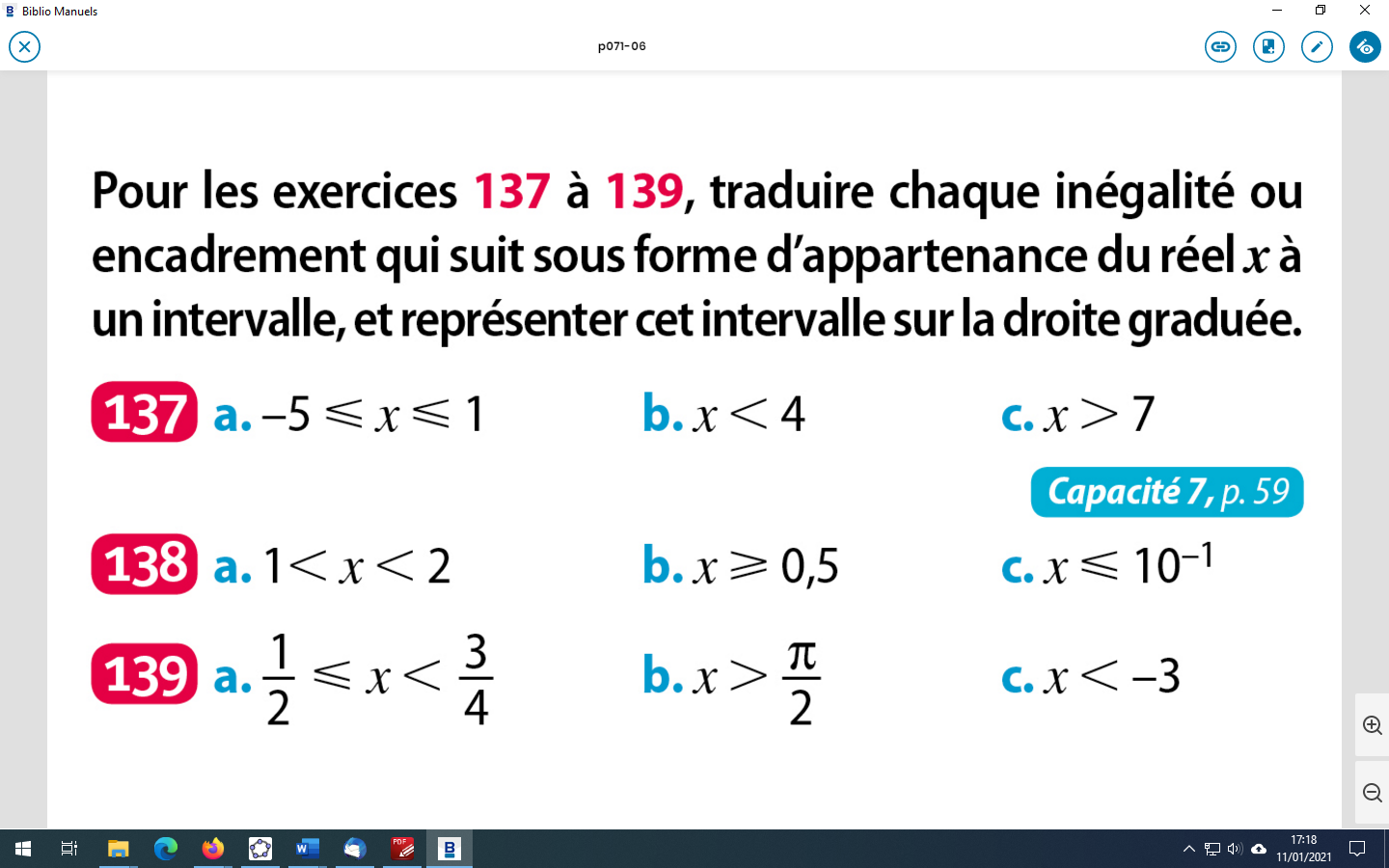
∈

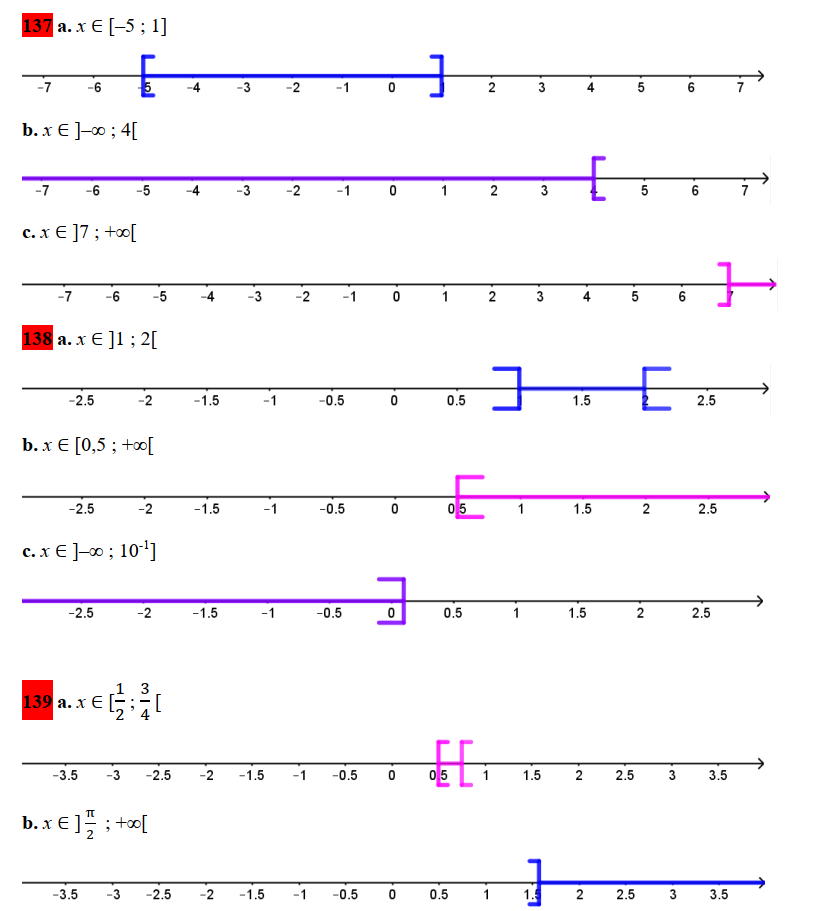
∈

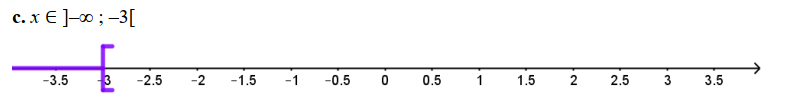
∈

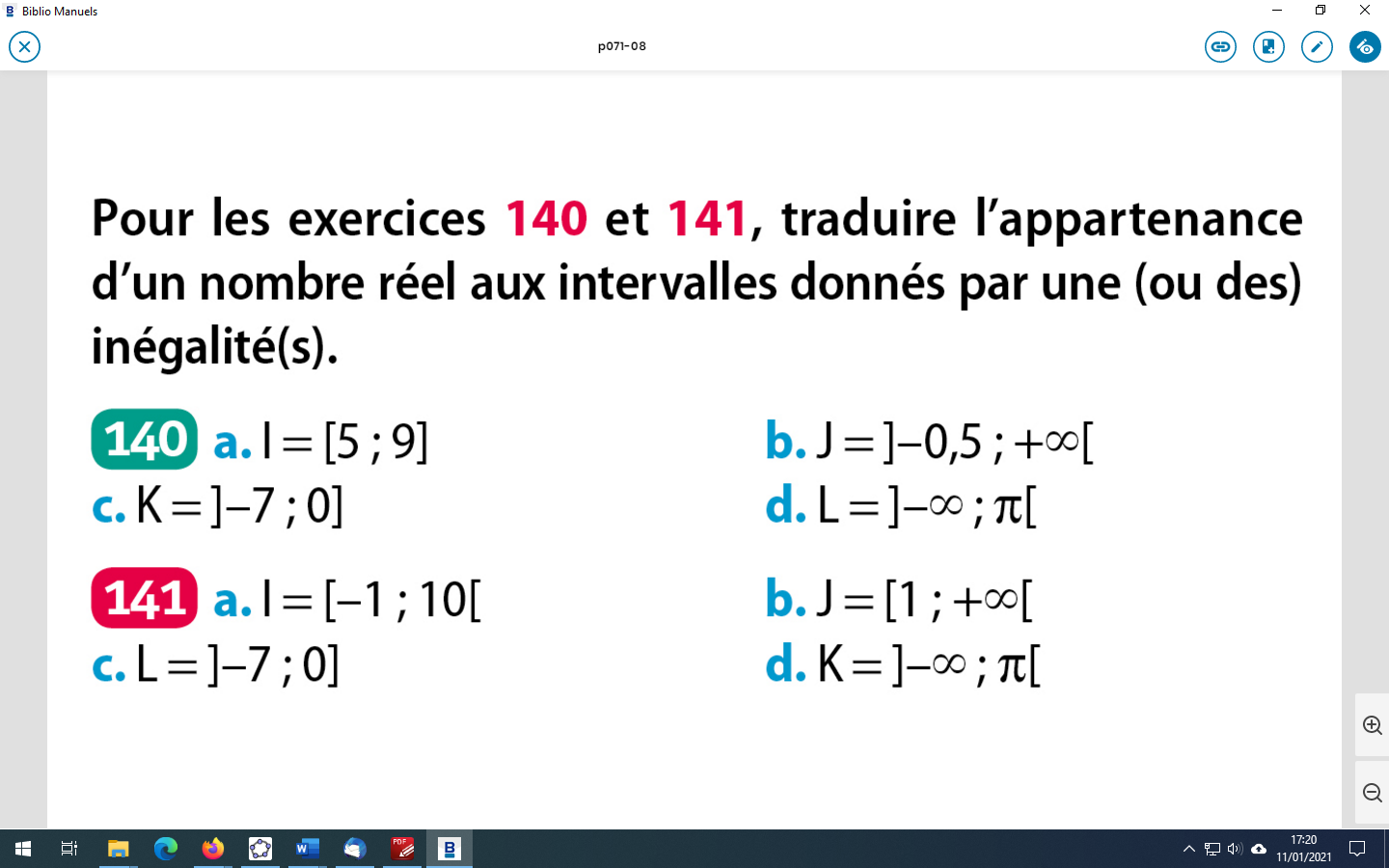
∈

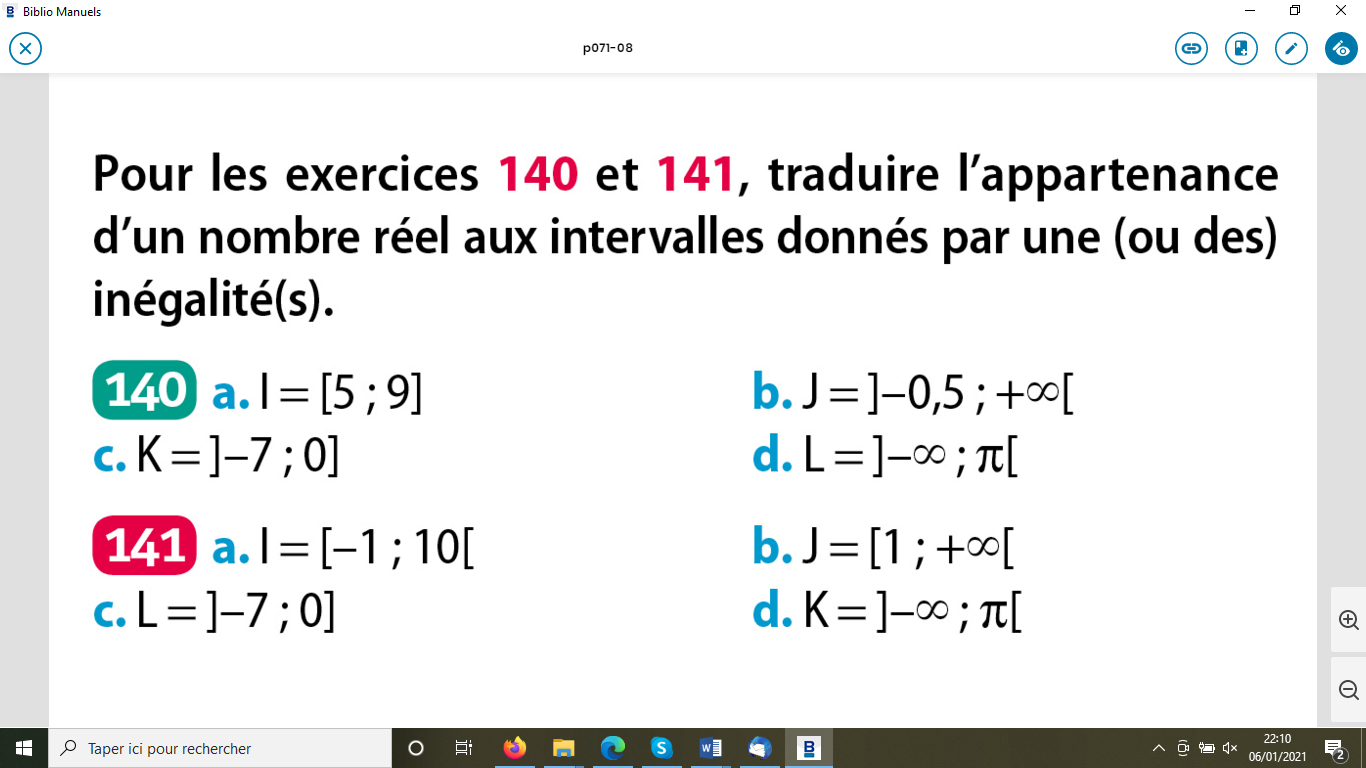












a) équivaut à .

b) équivaut à .

c)équivaut à .

d) équivaut à .

