See Getting Started With LaTex to learn how use Overleaf for LaTexing your homework.

The LaTex Lessons provide LaTex help by example.

Take a look at the helpful Latex Lesson for this exercise Delimiters and Sets.

Exercise. A variant of Exercise 1.1.101.   §1.1

▷ $\boxed{\text{In 1–3}}$, replace the $*$'s by math symbols (e.g., $\mathbb{C}$) and replace the $\{*?*\}$'s as to denote a set in set builder notation, so use a { and a } (so of the form: { some math stuff }).

1. The set of natural numbers, which is denoted by $*$, is the set

$$\{*?*\}. \tag{1}$$

2. The set of integers, which is denoted by $*$, is the set

$$\{*?*\}. \tag{2}$$

3. The set of rational numbers, which is denoted by $*$, is the set

$$\{*?*\}. \tag{3}$$

▷ $\boxed{\text{In 4–5}}$, answer Yes or No and then **justify your answer**. Use complete sentences.

4. Is the set of natural numbers closed under division?

Put your answer here.

5. Is the set of irrational numbers closed under division? (You may use that $\sqrt{2} \notin \mathbb{Q}$.)

Put your answer here.