Lesson 7

Use calculator to find irrational number

Step 1. Enter \( \sqrt{2} \) in calculator. The decimal is the approximate of \( \sqrt{2} \). You can identify where \( \sqrt{2} \) is by using the nearest tenth. So, \( \sqrt{2} \) lies between 1.4 < \( \sqrt{2} \) < 1.5.

Step 2. Graph the interval 1.4-1.5 on number line.

Step 3.

The approximate value of \( \sqrt{2} \) in 2 decimal places is 1.41. It is a rational number because any decimal with a finite number of decimal places is a rational number. 1.41 is closer to 1.4 than 1.6, so \( \sqrt{2} \) is located closer to 1.4 on the number line.

Step 4. Use 1.41 to approximate \( \sqrt{2} \) on the number line.