To convert the repeating decimal 2.5 (where the digit 5 repeats indefinitely) into a fraction, we can follow these steps:

1. **Define the repeating decimal:** Let's represent the repeating decimal as **x**:

   x = 2.55555...

2. **Multiply to eliminate the repeating part:** To isolate the repeating decimal, we multiply both sides of the equation by 10:

   10x = 25.55555...

3. **Set up an equation:** Now, we have:

   ```
   10x = 25.55555...
   x = 2.55555...
   ```

   Next, we subtract the second equation from the first:

4. **Subtract the equations:**

   ```
   10x - x = 25.55555... - 2.55555...
   9x = 23
   ```

5. **Solve for x:** Now, divide both sides by 9:

   ```
   x = 23/9
   ```

6. **Conclusion:** Therefore, the repeating decimal 2.5 can be expressed as the fraction **23/9**.

And that's how you convert 2.5 repeating into a fraction!