## Dividing by Powers of 10

Fill in the missing information below. You may use a calculator.

|  | Number <br> Sentence | Number Sentence Without <br> Exponents | Quotient/ <br> Answer | Observations <br> (How did the placement of the decimal change?) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $78.5 \div 10$ |  |  |  |
| 2 | $7.85 \div 10^{2}$ | $7.85 \div(\mathbf{1 0 \times 1 0}) \mathbf{7 . 8 5} \div \mathbf{1 0 0}$ |  |  |
| 3 | $785 \div 10^{3}$ |  |  |  |
| 4 | $23.4 \div 10^{4}$ |  |  |  |
| 5 | $2.34 \div 10^{5}$ |  |  |  |
| 6 | $234 \div 10^{2}$ |  |  |  |
| 7 | $27.6 \div 10^{3}$ |  |  |  |
| 8 | $276 \div 10^{4}$ |  |  |  |
| 9 | $2.76 \div 10^{5}$ |  |  |  |

Explain to a partner: Why there are patterns of the placement of the decimal point when a decimal is divided by a power of 10 . Discuss your best explanation and write it below. Your may continue on the back if needed.

