| Fill in the Blanks | Recurring Decimal Proof |
|---|---|

| $x$ as recurring decimal | Write out multiples of $x$ | Subtract | $x$ as a fraction |
|---|---|---|---|
| $x = 0.\dot{7}$ | $10x = 7.\dot{7} = 7.77777\ldots$<br>$x = 0.\dot{7} = 0.77777\ldots$ | $9x = 7$ | $x = \frac{7}{9}$ |
| $x = 0.\dot{2}$ | $10x =$<br>$x =$ | | |
| $x = 0.\dot{3}\dot{5}$ | $100x = 35.\dot{3}\dot{5} = 35.3535\ldots$<br>$x = 0.\dot{3}\dot{5} = 0.3535\ldots$ | $99x = 35$ | |
| $x = 0.\dot{4}\dot{1}$ | $100x =$<br>$x =$ | | |
| $x = 0.\dot{2}\dot{7}$ | | | |
| $x = 0.\dot{6}1\dot{3}$ | $1000x =$ | | |
| $x = 0.0\dot{2}$ | $100x = 2.\dot{2} = 2.22222\ldots$<br>$10x =$ | | |
| $x = 0.1\dot{4}\dot{3}$ | | | |
| $x = 0.93\dot{2}$ | | | |
| $x = 0.9\dot{3}\dot{2}$ | | | |
| $x = 0.0\dot{0}\dot{5}$ | | | |