Fill In The Blanks…

**Recurring Decimal Proof**

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