

**EP Step 2**  
**Day 77 answers**

**THE REPEATER vs. THE TERMINATOR**

UNIT FRACTION	PRIME FACTORIZATION OF DENOMINATOR	DECIMAL FORM	TERMINATES OR REPEATS
1/2	PRIME	.5	Terminates
1/3	PRIME	.3333...	Repeats
1/4	2x2	0.25	Terminates
1/5	PRIME	0.2	Terminates
1/6	2x3	0.16666...	Repeats
1/7	PRIME	0.142857142...	Repeats
1/8	2x2x2	0.125	Terminates
1/9	3x3	0.111...	Repeats
1/10	2x5	0.1	Terminates
1/11	PRIME	0.0909...	Repeats
1/12	2x2x3	0.08333...	Repeats
1/13	PRIME	0.076923...	Repeats

1. 1/2, 1/4, 1/5, 1/8, 1/10
2. If the factors of the denominator are made up of 2s and or 5s, the decimal will terminate.
3. (answers may vary) Ex: 1/20, because the factors of the denominator are 2x2x5
4. The denominators are all prime numbers.
5. They will be repeating decimals (unless the denominator is 2 or 5).