Separable Differential Equations (1.4) and Homogeneous first-order DE's (1.8)

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Instructor:	Dr. Katherine Evans
Class:	Linear Algebra and Differential Equations
Time:	Monday, Wednesday, Friday 12:00PM - 1:00PM

Separable Differential Equations (1.4)

1 Exercises: 1-11

$$20202020! \rightarrow 20202020$$

$$a_i = \frac{20202020}{5^i} \qquad \text{using only whole numbers}$$

$$\text{Result} = \sum_{i=1}^{n} a_i \qquad \text{while } a_i \geq 1$$

$$a_1 = \frac{20202020}{5^1} \qquad = 4040404a_2 \qquad = \frac{20202020}{5^2} \quad = 808080.8$$

$$a_3 = \frac{20202020}{5^3} \qquad = 161616.16$$

$$a_4 = \frac{20202020}{5^4} \qquad = 32323.232$$

$$a_5 = \frac{20202020}{5^5} \qquad = 6464.6464$$

$$a_6 = \frac{20202020}{5^6} \qquad = 1292.92928$$

$$a_7 = \frac{20202020}{5^7} \qquad = 258.585856$$

$$a_8 = \frac{20202020}{5^8} \qquad = 51.7171712$$

$$a_9 = \frac{20202020}{5^9} \qquad = 10.34343424$$

$$a_10 = \frac{20202020}{5^{10}} \qquad = 2.068686848$$

$$a_11 = \frac{20202020}{5^{11}} \qquad = 0.4137373696$$

$$= 5050500$$