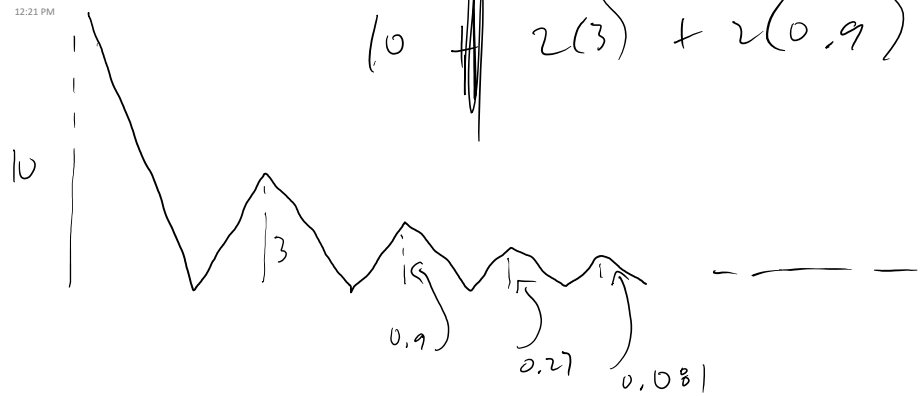
$$10 + 2(3) + 2(0.9) + 2(0.27) + 2(0.081) + \cdots$$



$$10 + \frac{6}{1-0.3}$$

$$= 10 + \frac{6}{0.7} = 18.571$$

$$s = \frac{1}{2} g t^2 = 16 t^2$$

$$t = \sqrt{\frac{s}{16}} = \frac{1}{4}\sqrt{s}$$

$$\text{time} = \frac{\sqrt{10}}{4} + 2\frac{\sqrt{3}}{4} + 2\frac{\sqrt{0.9}}{4} + \cdots$$

$$\frac{\sqrt{10}}{4} + \frac{\frac{2\sqrt{3}}{4}}{1-\sqrt{0.3}}$$