

Solution:

(1)

(a)

Let *Amount* = x .

$$\text{Present value} = \frac{x}{1 + 0.08} + \frac{x}{(1 + 0.08)^2} + \cdots + \frac{x}{(1 + 0.08)^5} = \frac{x}{0.08} \left(1 - \frac{1}{1.08^5} \right)$$

$$\Rightarrow x = \$600,000 \times \frac{0.08}{\left(1 - \frac{1}{1.08^5} \right)} = \$150,273.87$$

(b)

$$\Rightarrow x = \$600,000 \times \frac{0.10}{\left(1 - \frac{1}{1.10^5} \right)} = \$158,278.48$$

(2)

Mining.