

## Answer on Question #77256 – Math – Algebra

We have geometric progression:  $\frac{5}{8}, 1\frac{1}{4}, 2\frac{1}{2}, 5, \dots$  , it means that we can find the common ratio:

$$q = \frac{b_2}{b_1} = \frac{1\frac{1}{4}}{\frac{5}{8}} = \frac{\frac{5}{4}}{\frac{5}{8}} = 2$$

Now it's possible to take the sum of the first 8 terms by formula:

$$S = \frac{b_1(1-q^n)}{1-q} = \frac{\frac{5}{8}(1-2^8)}{1-2} = \frac{5(-255)}{-8} = 159.375$$