Find the sum to infinity of the series:
$10-5+2.5-1.25+...$
$6\frac{2}{3}$
Find the sum to infinity of the series:
$3+1+\frac{1}{3}+\frac{1}{9}+...$
4.5
The sum to infinity of a positive geometric series is three times the sum to two terms. Find the common ratio.
$\frac{1}{\sqrt{3}}$ or $\frac{\sqrt{3}}{3}$
The sum to infinity is twice the first term
Find the common ratio
$\frac{1}{2}$
Find the sum to infinity of the series:
$9+8.1+7.29+6.561+...$
90
The sum to 4 terms of a positive geometric series is 15 and the sum to infinity is 16. Find the first term.
8
The sum to three terms is 9 and the sum to infinity is 8
Find the first term
12
The first term is 10 and the sum to infinity is 30
Find the common ratio
$\frac{1}{3}$ or $\frac{2}{3}$
The first term is -5 and the sum to infinity is -3
Find the common ratio
-2
The common ratio is $\frac{2}{3}$ and the sum to infinity is 60
Find the first term
20
$\sum_{r=1}^{8} 4\times0.5^{r}$
4
The common ratio is $-\frac{1}{3}$ and the sum to infinity is 10
Find the first term
$-\frac{1}{3}$ or $\frac{1}{3}$
Find the sum to infinity of the series:
$40+10+2.5+0.625+...$
$\frac{160}{3}$
$\sum_{r=1}^{\infty} 2\left(\frac{1}{3}\right)^{r}$
1 or 2
Find the sum to infinity of the series:
$1+0.1+0.01+0.001+...$
$\frac{10}{6}$