VD 8.3.2

Find sum of the following series if possible (round to the thousandth place when a definite sum is found)

$1.\sum_{k=6}^{15} 3 \left(\frac{4}{9}\right)^k$.042
$2.\sum_{k=0}^{\infty} 2\left(\frac{1}{3}\right)^k$	3
$3.\sum_{k=0}^{\infty} (-3) \left(\frac{2}{3}\right)^k$	-9
$4.\sum_{k=0}^{\infty} 4\left(\frac{5}{4}\right)^k$	No definite sum
$5. \sum_{k=2}^{20} \left(\frac{4}{3}\right)^k$	1256.014
$6.\sum_{k=0}^{30} \left(\frac{2}{5}\right)^{k}$	0.107
$7.\sum_{k=4}^{15} \left(-\frac{3}{2}\right)^k$	264.761