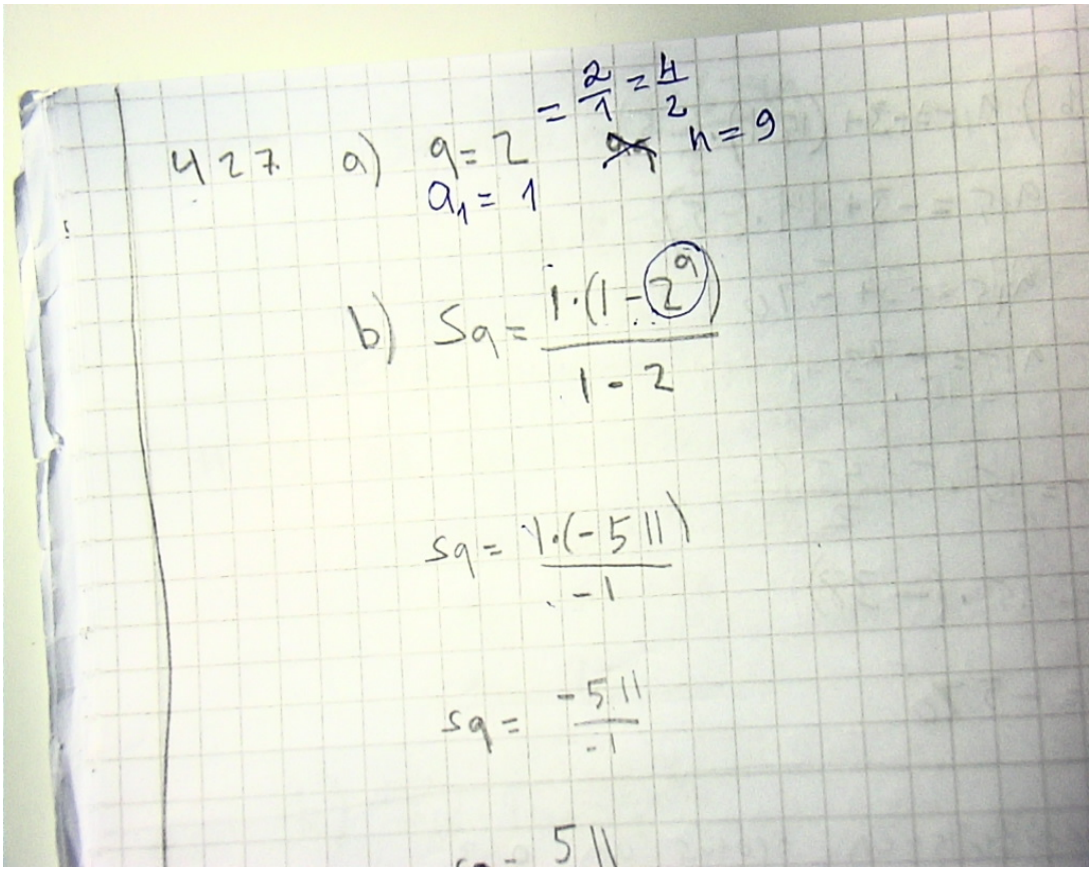
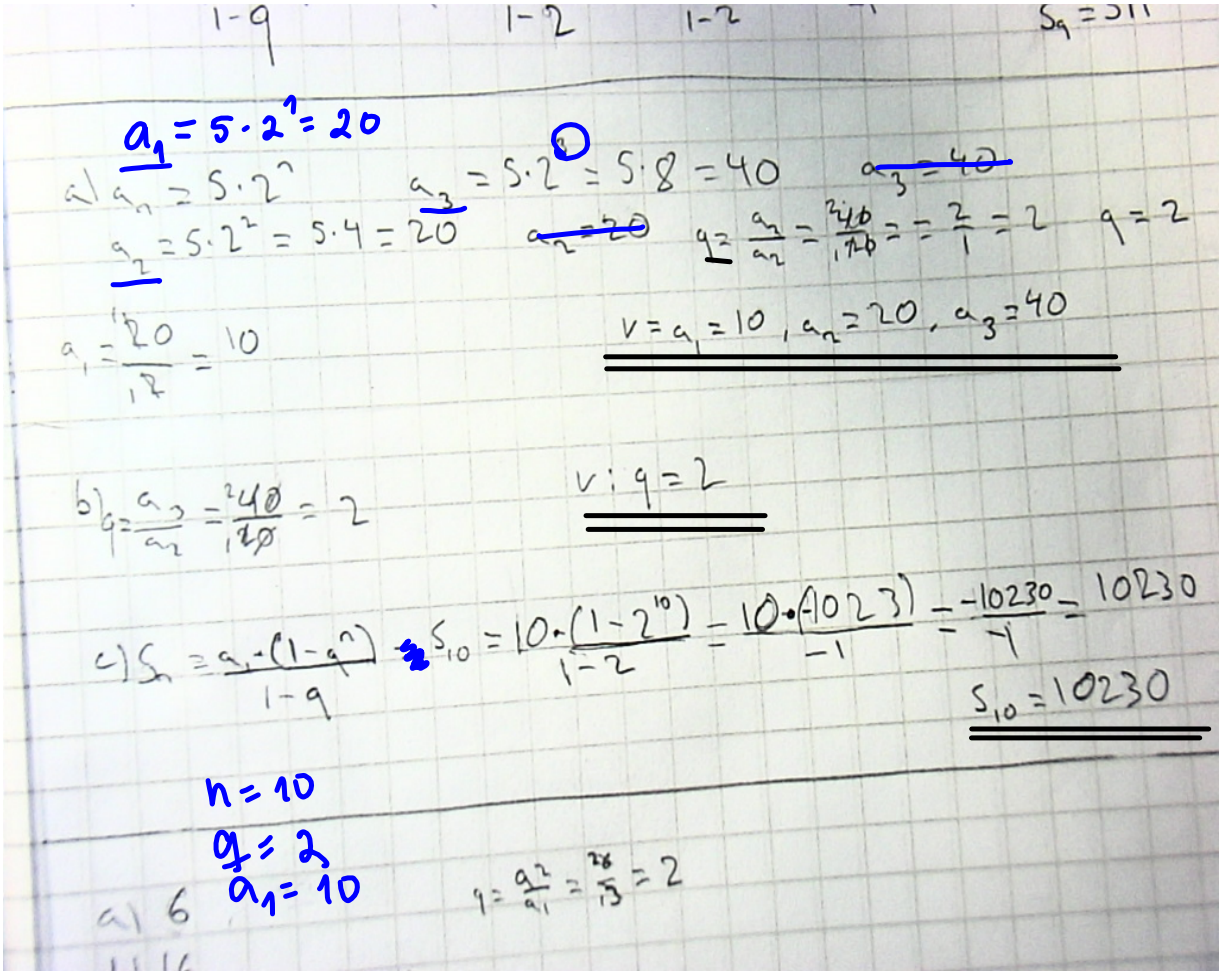
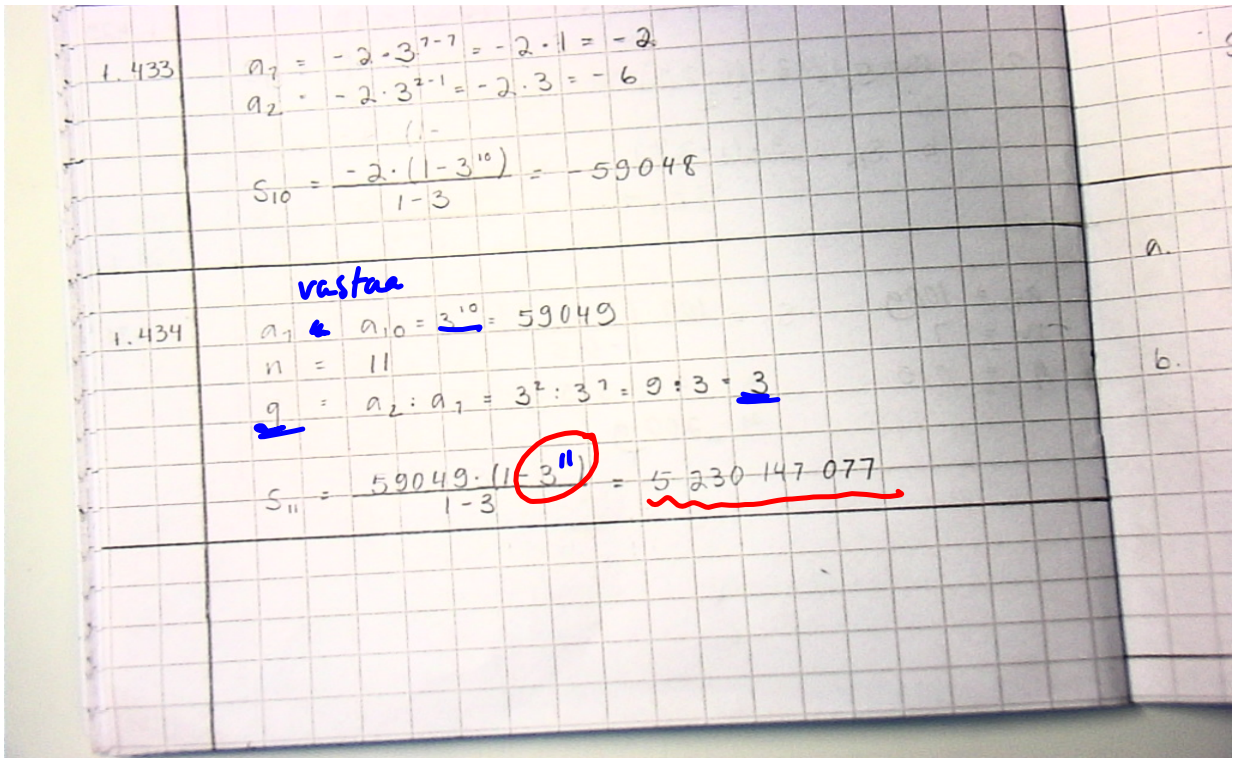

427. a) $q = 2 = \frac{2}{1} = \frac{4}{2}$
$a_1 = 1$
$n = 9$
b) $S_9 = \frac{1 \cdot (1 - 2^9)}{1 - 2}$
$S_9 = \frac{1 \cdot (-511)}{-1}$
$S_9 = \frac{-511}{-1}$
$= 511$


1-q
1-2
1-2
$S_q = 511$
$a_1 = 5 \cdot 2^1 = 20$
a) $a_n = 5 \cdot 2^n$
$a_3 = 5 \cdot 2^3 = 5 \cdot 8 = 40$
$a_3 = 40$
$a_2 = 5 \cdot 2^2 = 5 \cdot 4 = 20$
$a_2 = 20$
$q = \frac{a_3}{a_2} = \frac{40}{20} = \frac{2}{1} = 2$
$q = 2$
$a_1 = \frac{20}{2} = 10$
$v = a_1 = 10, a_2 = 20, a_3 = 40$
b) $q = \frac{a_3}{a_2} = \frac{40}{20} = 2$
v; $q = 2$
c) $S_n = \frac{a_1 \cdot (1 - q^n)}{1 - q}$
$S_{10} = \frac{10 \cdot (1 - 2^{10})}{1 - 2} = \frac{10 \cdot (-1023)}{-1} = \frac{-10230}{-1} = 10230$
$S_{10} = 10230$
$n = 10$
$q = 2$
$a_1 = 10$
a) 6
$q = \frac{a_2}{a_1} = \frac{26}{13} = 2$


1.433
$a_7 = -2 \cdot 3^{7-7} = -2 \cdot 1 = -2$
$a_2 = -2 \cdot 3^{2-1} = -2 \cdot 3 = -6$
$S_{10} = \frac{-2 \cdot (1 - 3^{10})}{1 - 3} = -59048$
vastus
1.434
a_1 ja $a_{10} = 3^{10} = 59049$
$n = 11$
$q = a_2 : a_1 = 3^2 : 3^1 = 9 : 3 = 3$
$S_{11} = \frac{59049 \cdot (1 - 3^{11})}{1 - 3} = 5\,230\,147\,077$
a.
b.