Geometric Sequences – Extra Practice

1. Find the missing terms for each of the following geometric sequences :
a) , 5 , , 125 b) 3, , , 375

c) $t\_{3}=-\frac{9}{50}$ ; $t\_{4}=\\_\\_\\_\\_$ ; $t\_{5}=-\frac{81}{1250}$ d) $t\_{5}=-162$; $t\_{6}=\\_\\_\\_\\_$ ; $t\_{7}=\\_\\_\\_\\_$ ; $t\_{8}=4374$
2. Determine the number of term in each of the following geometric sequences :
a) 3, 6, 12, …, 1536 b) $\frac{1}{2};\frac{1}{4};\frac{1}{8};…;\frac{1}{2048}$

c)$\frac{2}{81};\frac{4}{27};\frac{8}{9};…;6912$
3. Determine the general term of each geometric sequence if :
a) $t\_{3}=36 and t\_{4}=108$ b) $t\_{3}=99 and t\_{5}=11$
4. Most photocopiers can reduce an image up to 64% of its original size. How many successive reductions must be made (at the maximum level) so that the image obtained is less than 10% of the original image?