1a) observe that the largest # that can
be represented is of the form

0   1110   111
↑positive   ↑largest   ↑largest
         non-special   significand
         exponent

and the second largest is of the
form

0   1110   110

Decoding them creates

$1.875 \cdot 2^7 - 1.75 \cdot 2^7 = 2^7(1.875 - 1.75)$
$= 2^7 \cdot .125$

So $.125 \cdot 2^7$ is the difference
between the largest tiny floats.

1b) observe the smallest possible # is 0
and the 2nd smallest is

0   0000   001
↑positive ↑smallest   ↑smallest
         exp   sig. other than 0

decode this to get
$.125 \cdot 2^{-6}$ as the 2nd smallest #.

$.125 \cdot 2^{-6} - 0 = .125 \cdot 2^{-6}$ is the diff.

between the 2 smallest positive tiny
Floats