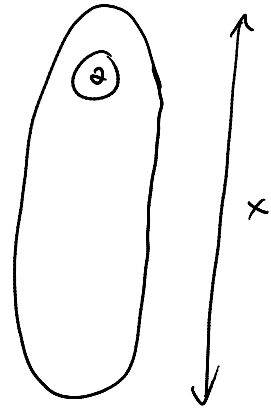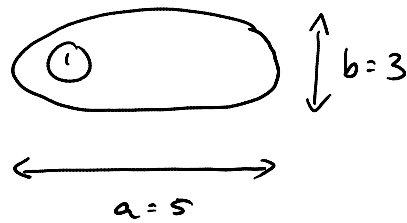# Section 6.2: cont'd

example: The two ellipses in the diagram below are similar. The area of the larger ellipse is exactly <u>twice</u> the area of the smaller one. Calculate the length x in the diagram (x is the larger ellipse's major axis). Give an exact answer.

areas scale as k^2

$k^2 = 2$
$k = \sqrt{2}$

$x = ka$
$\quad = \sqrt{2} \cdot 5$
$\quad = 5\sqrt{2}$