Scientific Notation in our everyday life

Task:

An ant has a mass of approximately 4×10^{-3} grams and an elephant has a mass of approximately 8 metric tons.

- a. How many ants does it take to have the same mass as an elephant?
- b. An ant is 10⁻¹ cm long. If you put all these ants from your answer to part
 (a) in a line (front to back), how long would the line be?
- c. Find two cities in the United States that are a similar distance apart to illustrate this length.

Note: 1 kg = 1000 grams, 1 metric ton = 1000 kg, 1m = 100 cm, 1km = 1000 m