(A)

THE MAGNITUDE OF LIVESTOCK POPULATION

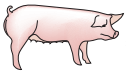
chicken number

$$\approx \frac{2 \cdot 10^{10}\ \text{chickens}}{7 \cdot 10^{9}\ \text{people}} \approx 2$$

cattle number

$$\approx \frac{1.5 \cdot 10^{9}\ \text{cattle}}{7 \cdot 10^{9}\ \text{people}} \approx 0.2$$

swine number



$$\approx \frac{1 \cdot 10^{9}\ \text{pigs}}{7 \cdot 10^{9}\ \text{people}} \approx 0.1$$

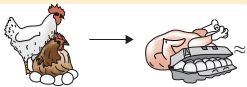
barnyard number

$$\approx \frac{3 \cdot 10^{10}\ \text{animals}}{7 \cdot 10^{9}\ \text{people}} \approx 4$$

(B)

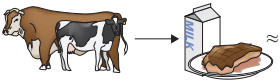
THE MAGNITUDE OF ANNUAL LIVESTOCK PROCESSING

poultry–egg number



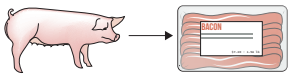
$$\approx \frac{7 \cdot 10^{10}\ \text{chickens} \cdot \text{year}^{-1}}{7 \cdot 10^{9}\ \text{people}} \approx \frac{10\ \text{chickens} \cdot \text{year}^{-1}}{1\ \text{person}}$$

dairy–beef number



$$\approx \frac{6 \cdot 10^{8}\ \text{cattle} \cdot \text{year}^{-1}}{7 \cdot 10^{9}\ \text{people}} \approx \frac{1\ \text{cow} \cdot \text{year}^{-1}}{10\ \text{people}}$$

pork number



$$\approx \frac{2 \cdot 10^{9}\ \text{pigs} \cdot \text{year}^{-1}}{7 \cdot 10^{9}\ \text{people}} \approx \frac{1\ \text{pig} \cdot \text{year}^{-1}}{3\ \text{people}}$$

barn-to-table number

$$\approx \frac{1 \cdot 10^{11}\ \text{animals} \cdot \text{year}^{-1}}{7 \cdot 10^{9}\ \text{people}} \approx \frac{15\ \text{animals} \cdot \text{year}^{-1}}{1\ \text{person}}$$