

**e** We get

**2.4** basketball courts each



Pop of world = 7.9 Billion

Area of USA = 9.834 million km<sup>2</sup>

$$\text{Area per person} = \frac{9.8 \times 10^6}{7,900 \times 10^6} = 0.0012 \text{ km}^2 = 1,200 \text{ m}^2 = 0.3 \text{ acres}$$

Area of a Basketball Court = 495 m<sup>2</sup> = 5,328 ft<sup>2</sup> = 0.122 acre

$$\frac{1,200}{495} = 2.4 \text{ basketball courts each!!!!}$$

If, however, you calculate how many people per km<sup>2</sup> it sounds much more crowded:

$$\text{How many people per km}^2 = 1 / 0.0012 = 833 \text{ per km}^2 = 2,168 \text{ per mile}^2$$

That tells us something about our perception of area.