

$$\begin{aligned} 20. \quad \text{area of rectangle} &= lb \\ &= 3 \times 2 \\ &= 6 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} \text{area of } \odot &= \pi r^2 \\ &= \pi \times \left(\frac{1}{2}\right)^2 \\ &= \frac{\pi}{4} \text{ m}^2 \end{aligned}$$

$$\begin{aligned} P(\text{die landing in } \odot) &= \frac{\pi}{4} \div 6 \\ &= \frac{\pi}{24} \end{aligned}$$

$$\begin{aligned} 21. \quad \text{total ball pens} &= 144 \\ \text{no. of defective pens} &= 20 \\ \text{no. of good pens} &= 144 - 20 \\ &= 124 \end{aligned}$$

$$\begin{aligned} P(\text{buys pen}) &= \frac{124}{144} \\ &= \frac{31}{36} \end{aligned}$$

$$\begin{aligned} P(\text{not buys}) &= \frac{20}{144} \\ &= \frac{5}{36} \end{aligned}$$