

60 people went to a cash register at a department store. 10 had blonde hair, 17 had black hair, 25 had brown hair and 8 had red hair. Determine the probability that the next person to go to the register has red hair.

$$\text{Probability} = \frac{\text{total ways a specific outcome will happen}}{\text{total number of possible outcomes}}$$

In our case specific outcome is that the next person to go to the register has red hair. And it is possible 8 ways (as we have 8 red haired persons). Total number of people equals 60, therefore total number of possible outcomes equals 60.

Hence:

$$\text{Probability} = \frac{8}{60} = \frac{2}{15}$$

Answer: 2/15