

## 13.1 Review - Warm - up

1. There are 450 books in the library in which 155 are math, 200 are English, 45 are science, and 100 were social studies. What is the experimental probability of selecting a math book at random to check out?

$$P(\text{MATH}) = \frac{155}{450} = .34\bar{4} = \boxed{34\%}$$

2. What is the theoretical probability of being dealt a diamond from a standard 52-card deck?

$$P(\diamond) = \frac{13}{52} = \frac{1}{4} = .25 = \boxed{25\%}$$

3. Of 3000 DVDs in our library, 650 are G rated. What is the theoretical probability that a DVD chosen at random is NOT rated G?

$$P(\text{NOT G}) = 1 - P(\text{G})$$
$$1 - \left(\frac{650}{3000}\right) = .783 = \boxed{78\%}$$