

[PERCENTAGES]

(§8.1 worksheet)

[1.] Suppose we flip a coin 100 times and get 40 heads and 60 tails – what percentage of the flips were heads? What percentage of the flips were tails? If we add the percentages together, what do we get?

[2.] What percentage of the cards in a deck are diamonds (exclude jokers).

[3.] What percentage of the cards in a deck are hearts (include 2 joker cards)

[4.] Suppose you roll a dice 40 times and get six for ten of those times. What percentage of the time do you roll a 6? What percentage of the time did you not roll a six?

[5.] I have 185 coins. If 20% of the coins are pennies, how many pennies do I have?

[6.] I have a collection of quarters and dimes only. If 40% of the coins are dimes, and 99 of the coins are quarters, how many dimes do I have?

[7.] A coin collector looks through a collection of coins and finds that 40% were minted in 1990 or later, 25% were minted in the 1980's, 25% in the 1970's and 500 were minted before 1970. How many coins were minted in 1990 or later?

[8.] Consider the following bits of conversation from a class reunion.

Classmate1: "I have two children"

You: "Wonderful! Is the *older* one a boy?"

Classmate1: "Yes!"

Classmate2: "I have two children"

You: "Wonderful! Is *at least one* of them a boy?"

Classmate1: "Yes!"

For each scenario, what is the percent chance that our classmate has two boys?