

Name:

Pd:

LG 7.2

Name: _____ Date: _____ Period: _____

7.2: Interpret and calculate probabilities from a table or Venn Diagram

1. The table below shows the number of students who eat breakfast in two different age groups:

	Passed the test	Didn't pass the test	Total
Went to office hours	28	4	32
Did not go to office hours	20	18	38
Total	48	22	70

Answer the following based on the table above:

a) What is the probability of a person going to office hours?

$$\frac{32}{70}$$

b) What is the probability of a person NOT passing a test?

$$\frac{22}{70}$$

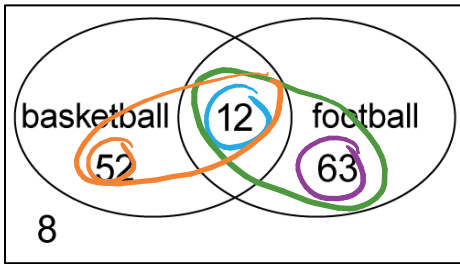
c) **GIVEN** that a person goes to office hours, what is the probability that they pass the test?

$$\frac{28}{32}$$

d) **GIVEN** that a person passes a test, what is the probability that they go to office hours?

$$\frac{28}{48}$$

5. In the Venn Diagram below, the sports that people like to watch are shown. A total of 135 students were surveyed.



a) What is the probability that a person chosen at random likes to watch both basketball and football?

$$\frac{12}{135}$$

b) What is the probability that a person chosen at random likes to watch ONLY football?

$$\frac{63}{135}$$

c) What is the probability that a person likes to watch football (this is different from b))

$$\frac{75}{135}$$

d) Given that a person likes to watch basketball, what is the probability that they do NOT like to watch football?

$$\frac{52}{64}$$