

Name: _____

Period: _____

9.3 - Two Way Tables

- 1) The two-way table shows the results of a football team's home games over the last five seasons and whether the stadium roof was open or closed.

		Stadium Roof	
		Open	Closed
Result	Win	25	7
	Loss	8	0

- a) How many home games did the team win?

32 games

- b) How many home games did the team lose with a closed roof?

0 games

- c) Find and interpret the marginal frequencies (totals).

32 home games were won

8 home games were lost

33 home games were played with an open roof

7 home games were played with a closed roof.

- d) What percent of the total home games did the team win with an open roof?

$$\frac{25 \text{ wins with an open roof}}{40 \text{ total games at home}} = .625 = 62.5\%$$

- 2) You randomly survey students in a school about whether they prefer cats or dogs as pets. The results are shown in the tally sheets. Complete the two-way table including the totals of the rows and columns.

Male Students	
Pet	Tally
Dogs	
Cats	

Female Students	
Pet	Tally
Dogs	
Cats	

		Pet Preference		Total
		Dogs	Cats	
Gender	Male	17	8	25
	Female	14	20	34
	Total	31	28	59

- 3) You randomly survey students in your school. You ask whether they spend more leisure time watching television, playing video games, or going online. You display your results in the two-way table.

			Leisure Time		
			Television	Video games	Internet
Grade		10th	25	38	12
		11th	32	26	16
		12th	30	20	30

- a) How many 11th-graders chose playing video games?

26

- b) Find and interpret the marginal frequencies.

87 students chose watching television

84 students chose playing video games

58 students chose going online

75 students are in 10th grade

74 students are in 11th grade

80 students are in 12th grade

- 4) You randomly survey students in a school about whether they prefer cats or dogs as pets. The results are shown in the tally sheets. Complete the two-way table including the totals of the rows and columns.

Hair Color of Female Classmates			
Red	Blonde	Brunette	Black
3	15	41	33

Hair Color of Male Classmates			
Red	Blonde	Brunette	Black
4	21	30	27

		Hair Color			
		Red	Blon.	Brun.	Blk
Gender	Male	3	15	41	33
	Female	4	21	30	27