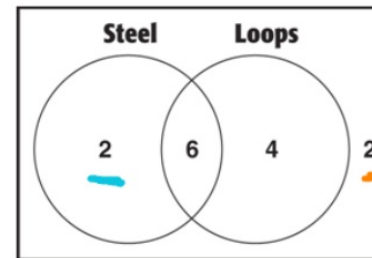# Lesson 3 Homework Practice

Two-Way Tables

For Exercises 1-6, use the Venn diagram at the right and the information below.

The Venn diagram compares the roller coasters at an amusement park as to whether or not they are made of steel and whether or not they have loops.

Steel   Loops

2   6   4   2

1. Complete the two-way table below.

	Steel	Not Steel	Total
Loops	6	4	10
No Loops	2	2	4
Total	8	6	14

2. How many roller coasters are at the amusement park?

1. Complete the two-way table below.

	Steel	Not Steel	Total
Loops	6	4	10
No Loops	2	2	4
Total	8	6	(14)

2. How many roller coasters are at the amusement park?

3. Find the relative frequencies from the table in Exercise 1 by row.

	Steel	Not Steel	Total
Loops	$\frac{6}{10} = 0.60$	$\frac{4}{10} = .4$	$\frac{10}{10} = 1.0$
No Loops	$\frac{2}{4} = .5$	$\frac{2}{4} = .5$	$\frac{4}{4} = 1.0$

4. Interpret the relative frequencies you found in Exercise 3.

*Half of the roller coaster have steel.

✗ Majority of rollercoasters have BOTH steel and loops.

5. Find the relative frequencies from the table in Exercise 1 by column. Round to the nearest hundredth if necessary.

6. Interpret the relative frequencies you found in Exercise 5.

Two-Way Tables

Solve.

1. Ricardo surveyed 110 eighth grade students to find out if they have a part time job. There are 60 students who have a part-time job, including 48 honor roll students. Half of the students who do not have a job are on the Honor Roll. Construct a two-way table summarizing the data.

	On Honor Roll	Not on Honor Roll	Total
Job	48	12	60
No Job	25	25	50
Total	73	37	110