### Lesson 1 Practice Problems

1. This two-way table shows the results of asking students if they prefer to have gym class in the morning or the afternoon.

| *
 | * morning
 | * afternoon
 | * total
 |
| --- | --- | --- | --- |
| * grade 6
 | * 15
 | * 8
 | * 23
 |
| * grade 8
 | * 18
 | * 21
 | * 39
 |
| * grade 10
 | * 12
 | * 26
 | * 38
 |
| * total
 | * 45
 | * 55
 | * 100
 |

* 1. How many students participated in the survey?
	2. How many students in grade 8 prefer to have gym in the morning?
	3. How many grade 10 students participated in the survey?
	4. How many students prefer to have gym in the afternoon?
1. A random sample of adults are asked about their preferences for a first dinner date with someone. Complete the two-way table so that it has the characteristics listed.
	* 122 people responded to the survey.
	* 50 of the people who said they order dessert said they also prefer to split the check.
	* 68 people prefer splitting the check.
	* 56 people prefer to skip dessert rather than ordering one.

| *
 | * order dessert
 | * no dessert
 |
| --- | --- | --- |
| * split the check
 | *
 | *
 |
| * one person pays
 | *
 | *
 |

*
1. Students in the 7th, 8th, and 9th grade were asked whether they prefer to write in pen or pencil.
	* 40 students prefer to write in pen.
	* 60 students prefer to write in pencil.
* Create values that could represent the number of students in the 7th, 8th, and 9th grade that responded to the survey.
1. A recent study observed the number of bike riders ages 0 to 20 that wear helmets. The results are represented in the table.

|  | * wear helmet
 | * did not wear helmet
 |
| --- | --- | --- |
| * 0-5 years
 | * 21
 | * 4
 |
| * 6-10 years
 | * 34
 | * 14
 |
| * 11-15 years
 | * 14
 | * 18
 |
| * 16-20 years
 | * 3
 | * 12
 |

* Make an observation based on a data value that is not in the table. Explain your reasoning.



© CC BY 2019 by Illustrative Mathematics®