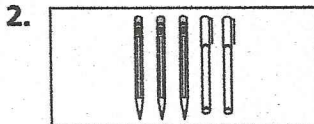
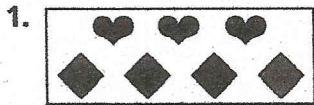


Skill: Writing Ratios

Investigation 1

Comparing and Scaling

Write three ratios that each diagram can represent.



The table at the right shows the results of a survey. Write a ratio for each comparison.

3. *Tacos* to *Pizza*

4. *Pizza* to *Tacos*

5. *Tacos* to the total

6. *Pizza* to the total

Which Meal Do You Want for the Party?

Tacos	Pizza
HHH IIII	HHH HHH
HHH	HHH I

The table below shows the results when the seventh-grade classes were asked whether they wanted chicken or pasta served at their awards banquet. Use the table for Exercises 7–8.

Banquet Preferences

Room Number	Chicken	Pasta
201	10	12
202	8	17
203	16	10

7. In Room 201, what is the ratio of students who prefer chicken to students who prefer pasta?

8. Combine the totals for all three rooms. What is the ratio of the number of students who prefer pasta to the number of students who prefer chicken?

9. A bag contains 8 yellow marbles and 6 blue marbles. What number of yellow marbles can you add to the bag so that the ratio of yellow to blue marbles is 2 : 1?

Additional Practice *(continued)***Investigation 1****Comparing and Scaling**

2. a. This table shows the typical weight of various parts of the body for an adult weighing 152 pounds. Estimate the percent of the total body weight for each part. Explain your reasoning.

Body Part	Weight (lb)
Head	10.5
Neck and Trunk	70.0
Arms	16.5
Hands	2
Legs	47.5
Feet	5.0

- b. Make a circle graph that shows the percent of the total body weight for each body part.
- c. The neck, trunk, and legs account for what total percent of the body weight?
3. a. Of the 756 students in Chad's middle school, 44% participate in sports, 29% play in the band, and 37% take the bus to school. How many students in Chad's middle school play in the band? Explain your reasoning.
- b. How many students in Chad's middle school take the bus to school?
- c. If you add up the percents of students who play sports, play in the band, and take the bus to school, you get 110%. Explain why the percents do not add to 100%.