

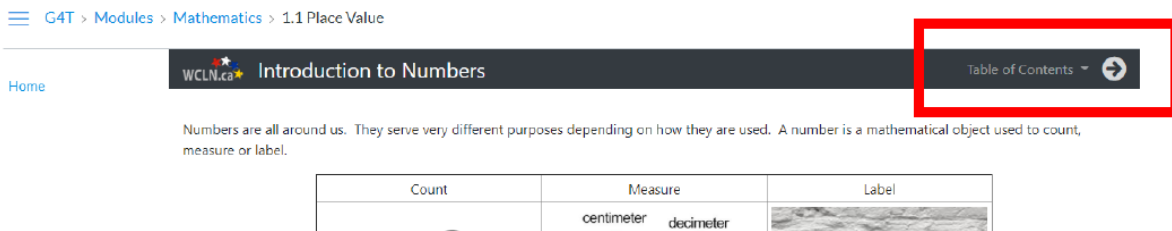
Grade 6 Mathematics
Week of January 11 – January 15

Lesson 4.2 – Equivalent Ratios

Lesson Materials

- Lessons for Section [4.2 Equivalent Ratios](#)
- Unit 4 Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the “Table of Contents” at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

<p>Monday</p> <ul style="list-style-type: none">• Equivalent Ratios• Practice (Spider)• LG 4.2, p. 4, #1 <p>Tuesday</p> <ul style="list-style-type: none">• Practice (Balloon)• Simplest Form• Practice #1• LG p. 4, #2	<p>Wednesday</p> <ul style="list-style-type: none">• Solving Problems• Practice #2 <p>Thursday</p> <ul style="list-style-type: none">• LG p. 5, #3 <p>Friday</p> <ul style="list-style-type: none">• Comparing Ratios• Truffles• Example• LG p. 6, #4-5
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4.2 EQUIVALENT RATIOS

1. Complete each table of equivalent ratios.

Example: $9 : 18 = 1 : \underline{2}$ $9 : 18 = \underline{3} : 6$ $9 : 18 = 18 : \underline{36}$
a) $6 : 9 = 2 : \underline{\quad}$ $6 : 9 = 12 : \underline{\quad}$ $6 : 9 = \underline{\quad} : 27$
b) $15 : 25 = 3 : \underline{\quad}$ $15 : 25 = \underline{\quad} : 50$ $15 : 25 = 60 : \underline{\quad}$

c) $10 : 14 = 5 : \underline{\quad}$ $10 : 14 = 30 : \underline{\quad}$ $10 : 14 = \underline{\quad} : 28$
d) $75 : 100 = 3 : \underline{\quad}$ $75 : 100 = \underline{\quad} : 12$ $75 : 100 = \underline{\quad} : 20$
e) $20 : 30 = 2 : \underline{\quad}$ $20 : 30 = \underline{\quad} : 15$ $20 : 30 = \underline{\quad} : 150$

2. Match each ratio with its simplest form.

- | | |
|-------------|--------------|
| a. 60:90 | 1:2 |
| b. 56:63 | 1:3 |
| c. 25:100 | 8:9 |
| d. 500:1000 | 11:23 |
| e. 22:46 | 2:3 |
| f. 36:48 | 3:4 |
| g. 27:30 | 1:4 |
| h. 13:39 | 9:10 |

3. Solve the following problems. *Reminder: Keep track of when you are dealing with part-to-part ratios and part-to-whole ratios.*
- There are 50 teenagers at a swim meet. The ratio of locals to out-of-town participants is 2:3. How many teenagers travelled from out-of-town to the swim meet?
 - A packet of mixed wildflower seeds contains a total of 75 seeds, some are poppies and some are daisies. The ratio of poppy seeds to daisy seeds is 1:2. How many poppy seeds are there in the packet?
 - In 1 km^0 of forest there are 2 coyotes. If the ratio coyotes to mice is 1:150. How many mice would you expect in 1 km^0 of forest? How many mice in 4 km^0 of forest?
 - To make 6 cups of trail mix, you need 2 cups of almonds, 3 cups of raisins, and 1 cup of chocolate chips. How much of each ingredient is needed to make 18 cups of trail mix?

4. Convert each ratio to a unit ratio. Reminder: A unit ratio has a second term of 1.

Ex. 5:2

b. 24:4

d. 4:3

$$5:2 = ? : 1$$

$$2 \div 2 = 1$$

$$5:2 = 2.5$$

2.5:1

a. 8:4

c. 10:7

e. 9:2

5. Compare ratios in order to answer the following problems. Reminder: To compare ratios, convert each ratio to a unit ratio.

a. A librarian wants to compare the ratios of fiction to non-fiction books checked out of the library. In the first week of school, the ratio is 7:5, whereas in the eighth week of school, the ratio is 22:13. During which week are students checking out a higher ratio of fiction to non-fiction books (ie. more fiction books for every non-fiction book)?

b. Two brands of fried rice have different ratios of vegetables to rice by weight. *Brand A* has a ratio of 5:8, whereas *Brand B* has a ratio of 2:3. Which brand has the highest ratio of vegetables to rice by weight?