

Lesson 8 Practice Problems

1. *Technology required.* Open a blank spreadsheet. Use "fill down" to recreate this table of equivalent ratios. You should not need to type anything in rows 3–10.

	A	B
1	3	7
2	6	14
3	9	21
4	12	28
5	15	35
6	18	42
7	21	49
8	24	56
9	27	63
10	30	70

2. A list of numbers is made with the pattern: Start with 11, and subtract 4 to find the next number.

Here is the beginning of the list: 11, 7, 3, . . .

Explain how you could use "fill down" in a spreadsheet to find the tenth number in this list. (You do *not* need to actually find this number.)

3. Here is a spreadsheet showing the computations for a different version of the birthday trick:

	A	B
1	month	7
2	day	4
3		
4	multiply month by 50	
5	add 30	
6	multiply by 2	
7	add the day	
8	subtract 60	
9		
10		

Explain what formulas you would enter in cells B4 through B8 so that cell B8 shows a number representing the month and day. (In this example, cell B8 should show 704.) If you have access to a spreadsheet, try your formulas with a month and day to see whether it works.

4. Write a formula you could type into a spreadsheet to compute the value of each expression.

a. $\frac{2}{5}$ of 35

b. $25 \div \frac{5}{3}$

c. $\left(\frac{1}{11}\right)^4$

d. The average of 0, 3, and 17

(From Unit 1, Lesson 7.)

5. The data set represents the number of cars in a town given a speeding ticket each day for 10 days.

2 4 5 5 7 7 8 8
 8 12

a. What is the median? Interpret this value in the situation.

b. What is the IQR?

(From Unit 1, Lesson 5.)

6. The data set represents the most recent sale price, in thousands of dollars, of ten homes on a street.

85 91 93 99 99 99 102 108
 110 115

a. What is the mean?

b. What is the MAD?

(From Unit 1, Lesson 5.)