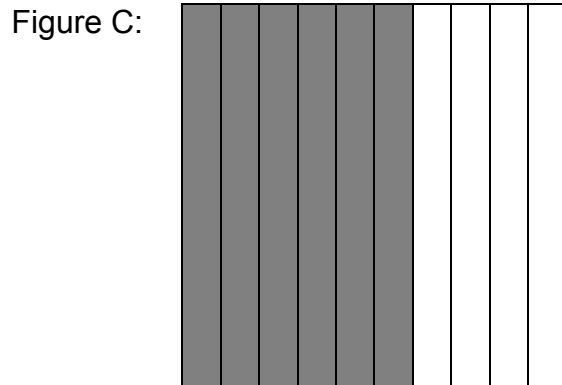
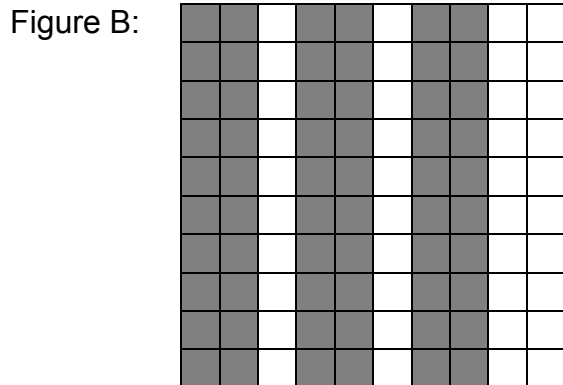


## PR2 PROBLEM BANK

### LESSON 1: EXTRA PRACTICE

1. Draw a garden with 10 total parts and 10 parts planted on grid paper. Then write this fraction as a percent.
2. Judy and Jane planted strawberries in their gardens. Judy planted  $\frac{1}{5}$  of her garden. Jane planted  $\frac{7}{10}$  of her garden. Represent both Judy and Jane's gardens on 10 X 10 grid paper.
  - a. How many squares did you shade for Judy's garden? How many for Jane's garden?
  - b. The shaded part is what fraction of the whole square for Judy's garden? For Jane's garden?
  - c. Write the fraction as a decimal and as a percent for Judy and Jane's garden.
3. Gerta thinks that all the figures below could represent the decimal 0.60. Is she correct? Explain your reasoning.

Figure A: 



## LESSON 1: EXTRA PRACTICE

(Continued)

4. Copy the chart below and rewrite the equivalent representations for each number.

	Fraction or Mixed Number	Decimal	Percent
a.			75%
b.		0.5	
c.			25%
d.		0.8	
e.	$\frac{1}{5}$		
f.			8%
g.		0.02	
h.	$\frac{7}{20}$		
i.			0.9%
j.		1.6	
k.	$\frac{3}{50}$		
l.		0.235	
m.			65%
n.		0.89	

5. Change each fraction to a decimal and a percent.

a.	$\frac{5}{8}$	b.	$\frac{1}{50}$	c.	$\frac{8}{10}$	d.	$\frac{1}{3}$
e.	$\frac{7}{8}$	f.	$\frac{4}{12}$	g.	$\frac{2}{25}$	h.	$\frac{7}{50}$

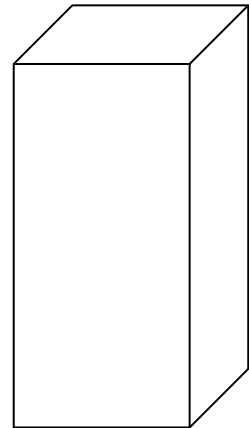
## LESSON 2: EXTRA PRACTICE

1. Create double number lines to help you answer the following questions.

a. What is 10% of 70?	b. What is 20% of 150?
c. What is 30% of 10?	d. What is 25% of 24?
e. What is 75% of 200?	f. What is 80% of 160?
g. What is 5% of 40?	h. What is 15% of 64?

2. The container to the right holds 600 ounces of liquid when full.  
Determine how much liquid makes it:

a. 50% full	b. 25% full
c. 75% full	d. 10% full
e. 20% full	f. 30% full
g. 5% full	h. 15% full
i. 1% full	j. 2% full
k. 0.5% full	l. 1.5% full



- m. What would it mean for the container to be 150% full?
- n. How much liquid would it contain if it were this full?
- o. Do you think this is possible? Explain.

3. Create double number lines if needed to help you answer the following questions.

- a. Don works 75% of the year. How many months does he work?
- b. There are a total of 30 students in Mrs. Anderson's classroom. 40% of them are girls. How many girls are there in the class? How many boys are there in the class?
- c. Jolene received an 80% on her spelling test. If there were 40 questions on the test, how many questions did she get correct?

## LESSON 2: EXTRA PRACTICE

(Continued)

4. Suppose a pair of jeans cost \$40. Make a double line showing \$40 as 100% of the cost.
- If there is a 50% off sale, how much do you save?
  - If there is a 70% off sale, how much do you save?
  - If there is a 15% off sale, how much do you pay?

5. Maria, Juan, and Steve must paint a room. They each start with a gallon of paint. After painting for 3 hours, they tell each other how much paint they have left.

Maria says "I have about 60% of my paint left."

Juan says "I have about  $\frac{2}{5}$  of my paint left."

Steve says "I have about two-thirds of my paint left."

How many total gallons of paint do they have left?

6. A bag contains 240 almonds. Dallas takes 80 of them. Marquille then takes 25% of what is left. Kieran then takes  $\frac{1}{4}$  of what is left. Laith gets the rest.
- How many almonds does Laith get?
  - What percent of the almonds does Laith get?

7. Bruno won \$5,000 in the lottery. He wants to give 50% of this money to family members. He decides to give 10% of the \$5,000 to his mom. He gives 10% of the remaining money to his dad. He then gives 10% of the remaining money to his sister. He then gives 10% of the remaining money to his brother. He then gives 10% of the remaining money to his nephew.

Bruno says "I have given 10% of my money to five different family members, therefore I have given 50% of my money away."

Explain why Bruno's conclusion is incorrect using numbers and words.

### LESSON 3: EXTRA PRACTICE

1. Find the new amount for the following situations.

a. \$10 with a 10% mark up	b. \$50 with a 20% discount
c. \$120 with a 25% mark up	d. \$25 with a 40% discount
e. \$500 with a 5% mark up	f. \$150 with a 80% discount
g. \$60 with a 100% mark up	h. \$450 with a 75% discount

2. David buys an iPad for \$460. There is 8% sales tax.
- How much tax would David need to pay?
  - David has \$500. Can he afford to buy the iPad? Why or why not?
3. Your family went out to dinner and the entire dinner cost \$42. Your dad wants to tip 15%. About how much tip should he leave?
4. Rudy sells computers. In June, he sold 200 computers.
- Rudy was out sick for several days in July, so his sales fell by 30% compared to his June sales. How many computers did Rudy sell in July?
  - In August, Rudy made a goal to increase his June sales numbers by 20% to help make up for a bad July. What is the least number of computers he needs to sell to reach his goal for August?
5. You are shopping for a new cell phone and have no more than \$250 to spend. You find one you like for \$230, and you know you have to pay 7% sales tax. Do you have enough money?
6. A store purchases DVD's for \$18.00 each and marks them up 60% to sell to their customers.
- Why do stores mark up the items before selling them?
  - What are customers charged for one DVD (without tax)?
  - Sales tax is 5%, what would be the total cost to the customers for one DVD?

### LESSON 3: EXTRA PRACTICE

(Continued)

7. Ally's income is based entirely on sales commissions. (Sales commission: A fee paid for services, usually a percentage of the total cost.)
  - a. If Ally sold \$15,000 worth of merchandise and received a 2% commission, how much did she earn?
  - b. If Ally sold \$2,500 worth of merchandise and received a 5% commission, how much did she earn?
  
8. Luna is going shopping for her birthday party. Party favors cost \$5.50 each. Balloons cost \$15 per dozen. Party hats cost \$7 for a package of 4.
  - a. Luna is having 12 friends over for her birthday party. She wants to have one hat, one balloon, and one party favor for each of her friends. What would it cost (not including sales tax) to buy these supplies?
  - b. The store is having a 20% off sale. How much would the supplies be after the discount?
  - c. How much would the total cost be after 6% sales tax?
  
9. Sweats and More sells workout clothes. The store buys a pair of black yoga pants for \$12 and marks it up 60%.
  - a. How much does a customer pay at Sweats and More for the pants?
  - b. What is the store's profit?
  
10. Jilly's Jeans sells jeans for \$45 a pair. Jeans R Us sells jeans for \$35 a pair.
  - a. Jilly's Jeans is having a sale and everything is 30% off. How much would one pair of jeans cost with the discount?
  - b. Jeans R Us is also having a sale and everything is 5% off. How much would one pair of jeans cost with the discount?
  - c. At which store would you get the better deal?