

2.6 Percent Problem Solving DAY TWO CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

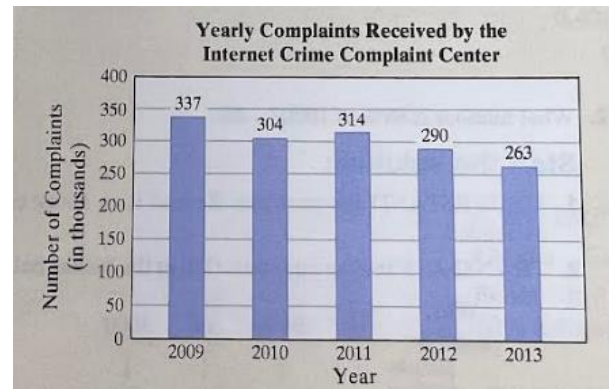
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

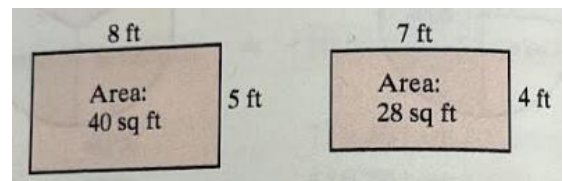
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Percent of Increase/Decrease	1 - 2	1 - 2	1 - 2
Mark-up/Discount	3	3	3
Solving Percent Equations	4 - 10	4 - 9	4 - 9, 11

Show all work to earn full credit, and use appropriate units.

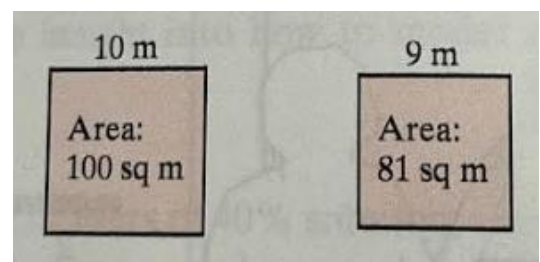
1. Use the graph to the right to answer the following questions.
 - a. The number of Internet-crime complaints decreased from 2012 to 2013. Find the percent of decrease. Round to the nearest tenth of a percent.
 - b. The number of Internet-crime complaints decreased from 2011 to 2012. Find the percent of decrease. Round to the nearest tenth of a percent.



2. Use the images provided to find the percent of decrease in area.
 - a. By decreasing each dimension by 1 unit, the area of a rectangle decreased from 40 square feet (on the left) to 28 square feet (on the right). Find the percent of decrease in area.



- b. By decreasing the length of the side by one unit, the area of a square decreased from 100 square meters to 81 square meters. Find the percent of decrease in area.



3. Solve each problem dealing with mark-up or discount. Show work for full credit, and use appropriate units.
 - a. Find the original price of a pair of shoes if the sale price is \$78 after a 25% discount.
 - b. Find the original price of a popular pair of shoes if the increased price is \$80 after a 25% increase.
 - c. Find last year's salary if, after a 4% pay raise, this year's salary is \$44,200.
 - d. Find last year's salary if, after a 3% pay raise, this year's salary is \$55,620.

Solve. If needed, round money amounts to two decimal places and all other amounts to one decimal place.

4. Find 23% of 20.
5. Find 140% of 86.
6. The number 40 is 80% of what number?
7. The number 56.25 is 45% of what number?
8. The number 144 is what percent of 480?
9. The number 42 is what percent of 35?

10. Fill in the WORK/Set-up & percent columns in the table below. The table contains a worked out example.

Top Cranberry-Producing States in 2014 (in millions of pounds)			
State	Millions of Pounds	WORK – Set-up	% of Total (round to nearest %)
Wisconsin	539		
Oregon	40		
Massachusetts	206		
New Jersey	56	$\frac{56}{857}$	7%
Washington	16		
TOTAL	857		

11. Why was the total for the percent column not equal to 100%, answer in a complete sentence?

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

