NAME_____   DATE_____

Student Worksheet for Percent Percent

In the rectangles shown on pages 1.3 and 1.4 side "a" is reduced in length by 20% while side "b" is increased by 20%. The area of the rectangle before the change is

   a. bigger than
   b. equal to
   c. smaller than

the area of the rectangle after the change.

Without actually measuring the rectangles circle the answer above that you think is correct. In the space below write why you think that your answer is correct.

_____
_____
_____
_____

When you moved point P around on page 1.6 what happened to the area of the rectangle?_____
_____
Was it possible to create several different rectangles having different shapes that had the same area? Circle Yes or No.
How many rectangles having an area of 30 units do you think it is possible to create?
_____
_____

On page 1.8 you are asked some questions. Answer them here.
What is 20% of 10 units of side "a"? _____What is 20% of 5 units of side "b"? _____
If you reduced side "a" by 20% how long would it be? _____
If you increased side "b" by 20% how long would it be? _____

For page 1.7 answer the following questions.
What was the area of the original rectangle before the changes? _____
What is the area of the rectangle after the changes? _____
Did the changes make the area smaller or larger? Circle either   Smaller or Larger.

Would you like to change you answer to the first question on this worksheet? Circle either   Yes   or No.
If you circled Yes, what would your new answer be? _____

Why do you think that the rectangle changed the way it did?

_____

_____

For page 1.11 given the same 10 X 5 rectangle and allowed to only increase one side by 20% and decrease the other side by 20%, how would you make the area of the rectangle bigger? _____

smaller? _____

Could you use the same rectangle (10 X 5) and the same rules (one side up by 20% and the other side down by 20%) and make a change that would cause the new rectangle to have the same area as the old rectangle?   Circle   Yes   or   No.

Explain why you think that your last answer (Yes or No) is correct.

_____

_____

Go back to page 1.9 on the handheld and confirm that your answers to the last few questions are correct. Why do you think that the rectangle changes this way?

_____

_____

_____

_____