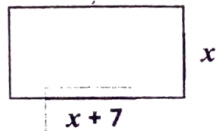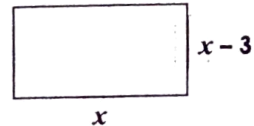| Name:	Date:
Topic:	Class:

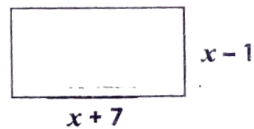| Main Ideas/Questions	Notes/Examples

AREA
Problems

1. Given the diagram below, find the value of x if the area of the rectangle is 78 square meters.

x
$x + 7$

2. Given the diagram below, find the dimensions of the rectangle if the area of the rectangle is 108 square meters.

$x - 3$
x

3. Find the dimensions of the rectangle below if the area is 128 square feet.
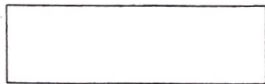
$x - 1$
$x + 7$

4. The dimensions of a rectangle can be expressed as $x + 3$ and $x - 8$. If the area of the rectangle is 60 square inches, find the value of x.
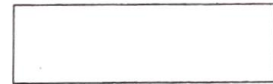
5. The length of a rectangular garden is 4 meters more than its width. The area of the rectangle is 60 meters. Find the dimensions of the rectangle.

6. The length of a rectangle is 6 meters less than its width. Find the dimensions of the rectangle if its area is 27 square meters.

7. A square is altered so that one dimension is increased by 5 meters and the other dimension is increased by 3 meters. If the area of the resulting rectangle is 99 square meters, find the area of the original square.

8. The length of a rectangle is seven less than twice the length of its width. If the area of the rectangle is 15 square meters, find the value of x.

9. A square is altered so that one dimension is increased by 5 inches and the other dimension is decreased by 2 inches. If the area of the resulting rectangle is 98 square inches, find the area of the original square.

10. Given the diagram to the left, if the area of the shaded region is 59 square inches, what are the dimensions of the outside rectangle?

10.

$2x - 1$

$x + 6$