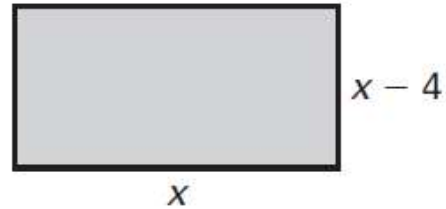Name _____ Per _____

Find the missing variable for each problem.
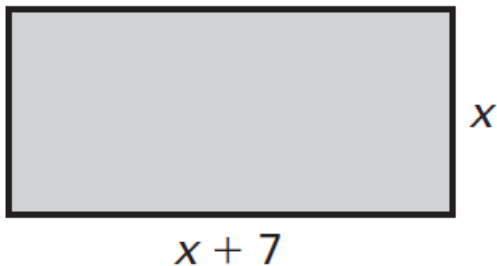
1. Area of the rectangle $= 28$

x

$x + 3$

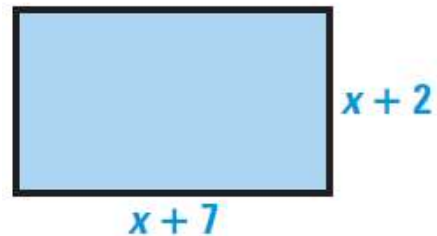2. Area of the rectangle $= 32$

$x - 4$

x

3. **Hopscotch** The community playground has a hopscotch pad that is 8 feet longer than it is wide. The total area of the pad is 48 square feet. What are the dimensions of the hopscotch pad?
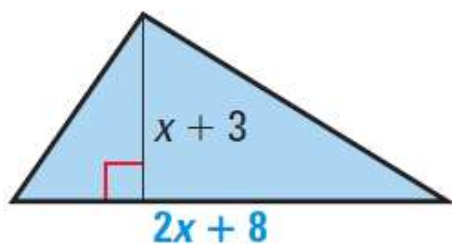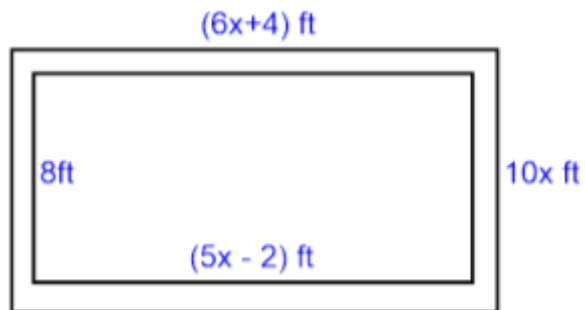
4. Area of rectangle $= 78$

x

$x + 7$

5. Area of rectangle $= 84$

$x + 2$

$x + 7$

6. Area of triangle = 42

$x + 3$

$2x + 8$

7. You are putting a mat around your rectangular trampoline. Write a polynomial expression to represent the area of the mat. (Simplify, but do not solve!)

(6x+4) ft

8ft

10x ft

(5x - 2) ft

8. Find the total area of the shape.

20 in

12 in

15 in

3 in