

Name: \_\_\_\_\_

Reason for being late: \_\_\_\_\_

Advanced Math Problem Solving  
2<sup>nd</sup> Quarter #6

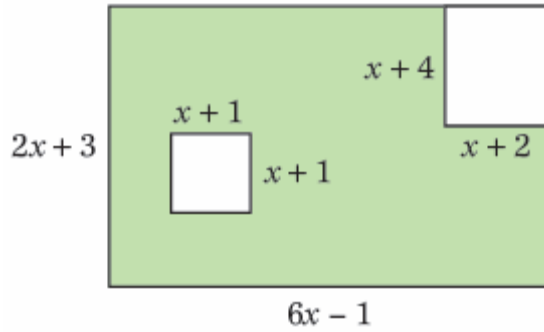
1. Two numbers have a sum of 8 and a product of 11. Find the exact sum of their reciprocals.

2. Determine the equation of the line that is tangent to the function  $f(x) = 3x^2 - 4x + 5$  at the point  $(2, f(2))$

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3. The area of the shaded region below is 1524 square units. If all the other regions are rectangles, what is the value of  $x$ ?



4. The area of an equilateral triangle is  $49\sqrt{3}$ . Determine the perimeter.