## SchoolNova, Math 5b <br> Homework 12 <br> Area and Perimeter <br> January 27, 2019

Please provide sufficient details about how you solved the problem. More difficult problems are marked with a $*$. If unable to solve a problem, please present your thoughts and any partial solution.

1. ABCD is a square, and E and F are midpoints of sides AD and AB , respectively, as shown. What fractional part of the total area of the square is the area of the triangle AEF?

2. The figure shown below is divided into 8 congruent squares as shown. The area of the figure is 72 square feet. What is the length of the darkened border in feet?

3. ABCD is a square which contains nine small congruent squares as shown. The area of square ABCD is 36 square units. What is the area of triangle ACE in square units?

4. Three squares each have sides of length 6 units and overlap each other as shown at the right. The points where the sides cross are midpoints. Find the area of the shaded figure in square units.

5. Triangle ABC has its vertices $\mathrm{A}, \mathrm{B}$ and C on the sides of a rectangle 4 units by 5 units as shown. What is the area of triangle ABC in square units?


## Square Units



Find the area of the figures shown.


