Star Puzzle

This star has five <u>disjoint</u> triangles. (A disjoint triangle is one that is only one "section" – it does not have any lines going through it.) By adding jus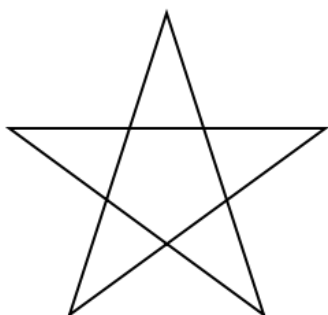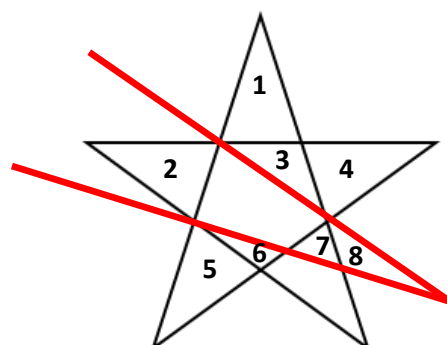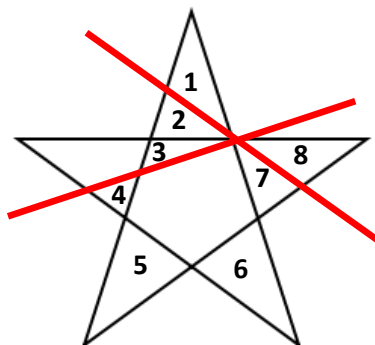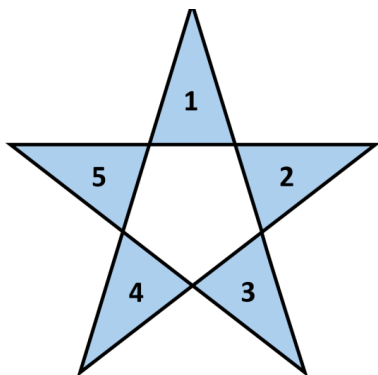t two <u>straight lines</u> to the diagram, you can go from five to ten disjoint triangles. How? Two examples are given that both show how you can make eight triangles. (source: playwithyourmath.com)
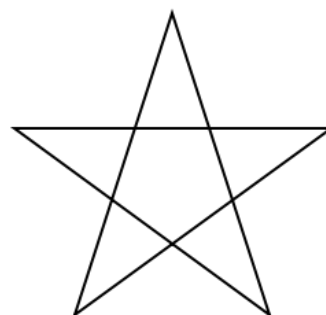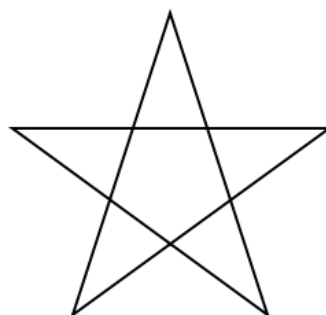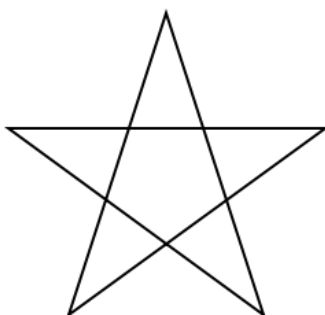
"Split 25" Puzzle (Source: playwithyourmath.com)

<u>Instructions:</u>

Take the number **25**, and break it up into as many pieces as you want.

    25 = **10** + **10** + **5**

    25 = **2** + **23**

    25 = **1** + **1** + **1** + **1** + **1** + **1** + **1** + **1** + **1**

          + **1** + **1** + **1** + **1** + **1** + **1** + **1** + **1**

          + **1** + **1** + **1** + **1** + **1** + **1** + **1** + **1**

The challenge:

Try to create the biggest product possible by multiplying these pieces together.

For example, if you multiply the numbers from the top sum together, you get 500. In the middle one, you get 46. In the bottom one, you get 1. You may use a calculator for this task. Can you find the biggest possible product?