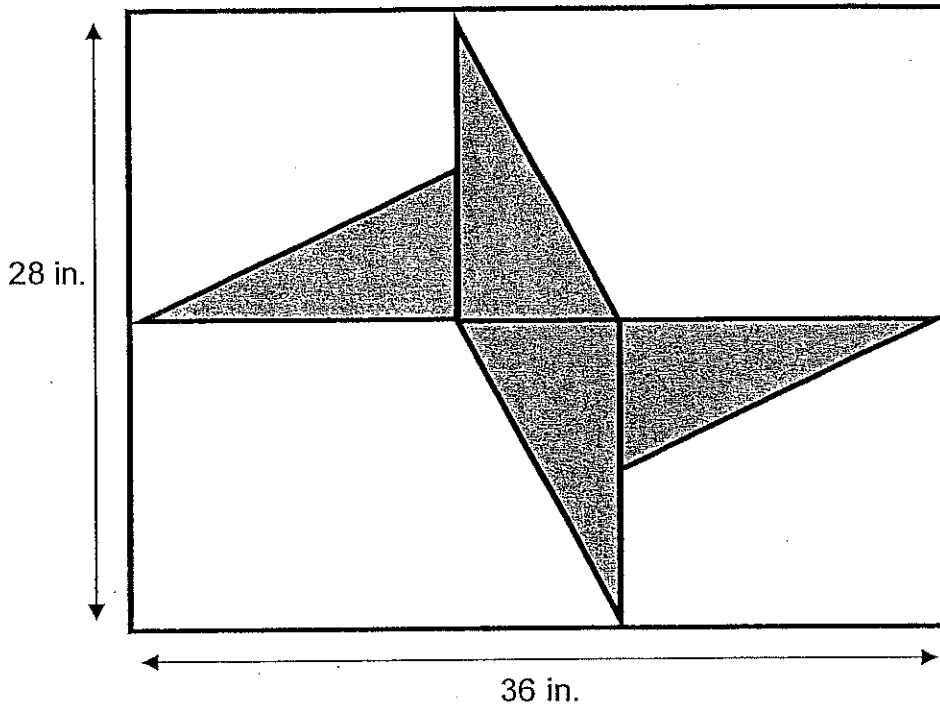


Student A

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 38 in

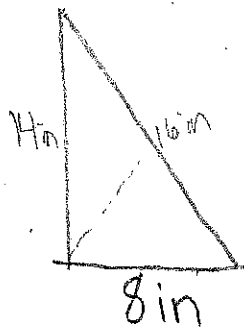
Explain how you arrived at your answer.

~~$$\begin{array}{r} 7 \\ \sqrt{28} \\ \underline{28} \\ 0 \end{array}$$

$$14 + 7 + 14 = 35$$~~

$$\begin{array}{r} 14 \\ 2\sqrt{28} \\ \underline{28} \\ 0 \end{array}$$

$$\begin{array}{r} 14 \\ 16 \\ + 8 \\ \hline 38 \end{array}$$

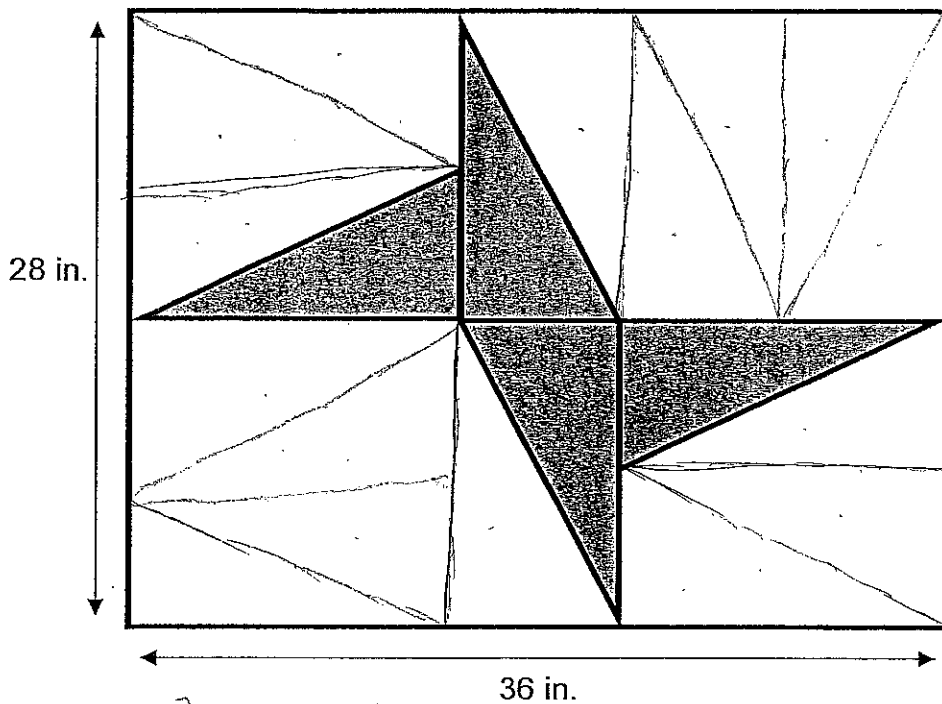


$$\begin{array}{r} 14 \\ + 14 \\ \hline 28 \end{array} \quad \begin{array}{r} 36 \\ - 28 \\ \hline 8 \end{array}$$

$$14 + 8 + 14 = 36$$

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 54???

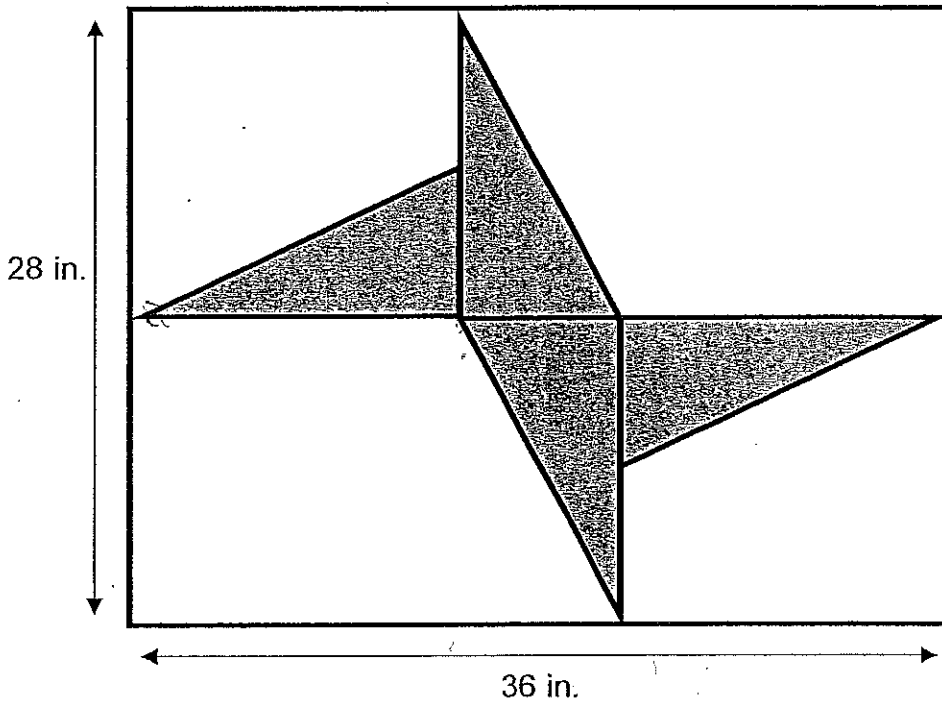
Explain how you arrived at your answer.

20 triangles fit in the box
1008 is the area of the box
20

$$\begin{array}{r} 36 \\ \times 28 \\ \hline 288 \\ + 720 \\ \hline 1008 \end{array}$$
$$\begin{array}{r} 54 \\ 20 \overline{)1008} \\ \underline{-100} \\ 00080 \end{array}$$

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 56 in sq

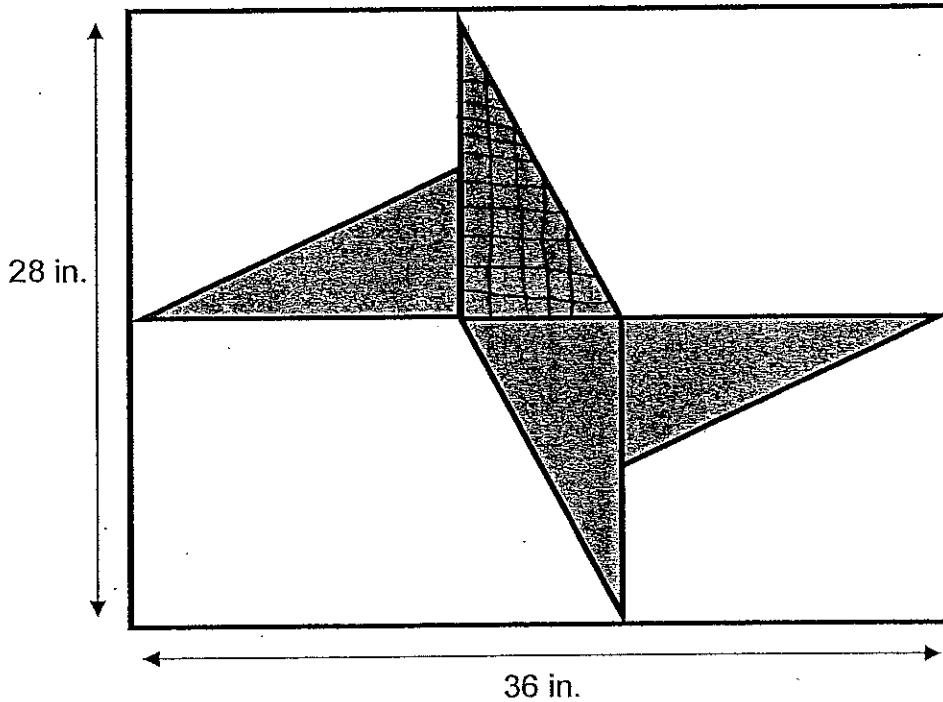
Explain how you arrived at your answer.

It took 2 triangles to make the complete height so cut it in $\frac{1}{2}$ so it's 14. for height. for the base there are 2 triangles going height way is 14 each. add them to get 28 which leaves 8" left for width. Multiply 14 and 4 equals.

$$\begin{array}{r} 14 \\ \times 4 \\ \hline 56 \end{array}$$

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: _____

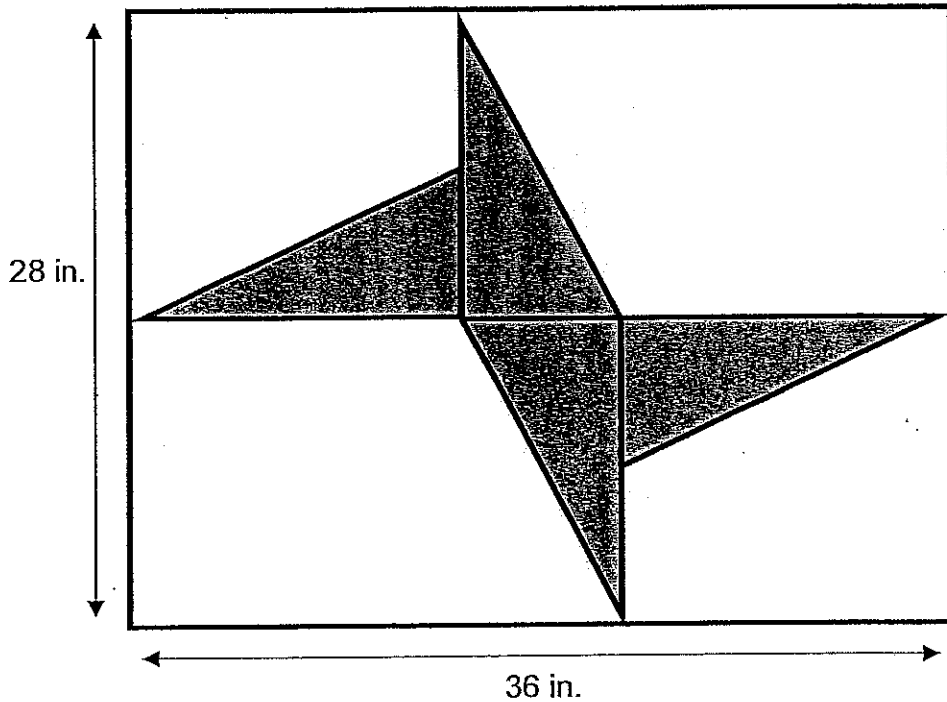
34 sq

Explain how you arrived at your answer.

The strategy I used was Draw a diagram. To get my answer I first thought about how to get an area of a triangle. I then decided to make the triangle into smaller squares in the inside. Last, I counted all of the squares to get my answer of 34 squares.

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 7

Explain how you arrived at your answer.

First I imagined that all of these triangles is $\frac{1}{4}$ of the whole box all together so half of width and height

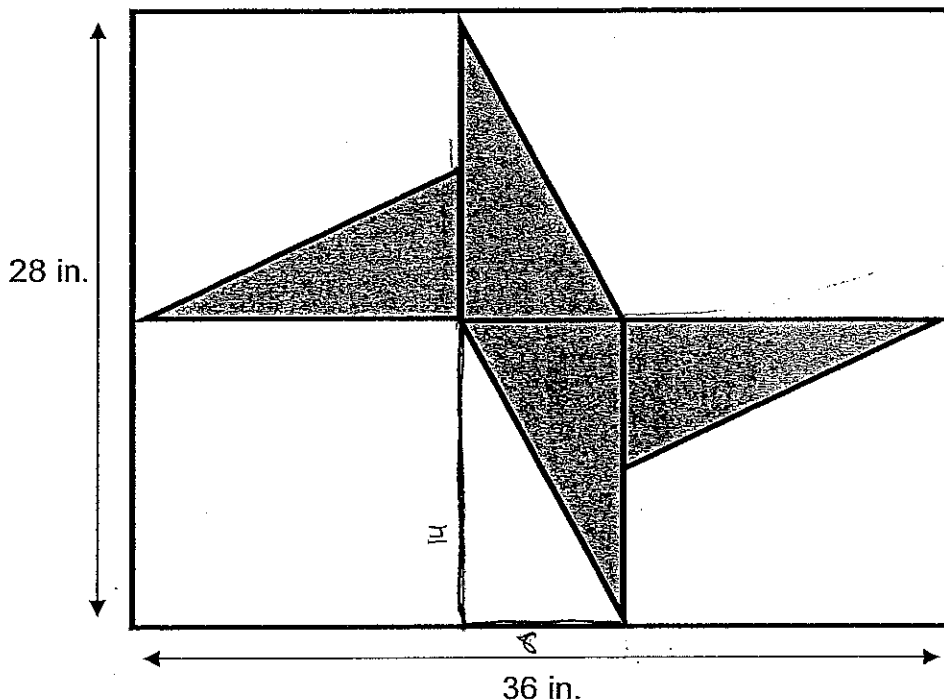


into $\frac{1}{4}$



Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 56 sq. in.

Explain how you arrived at your answer.

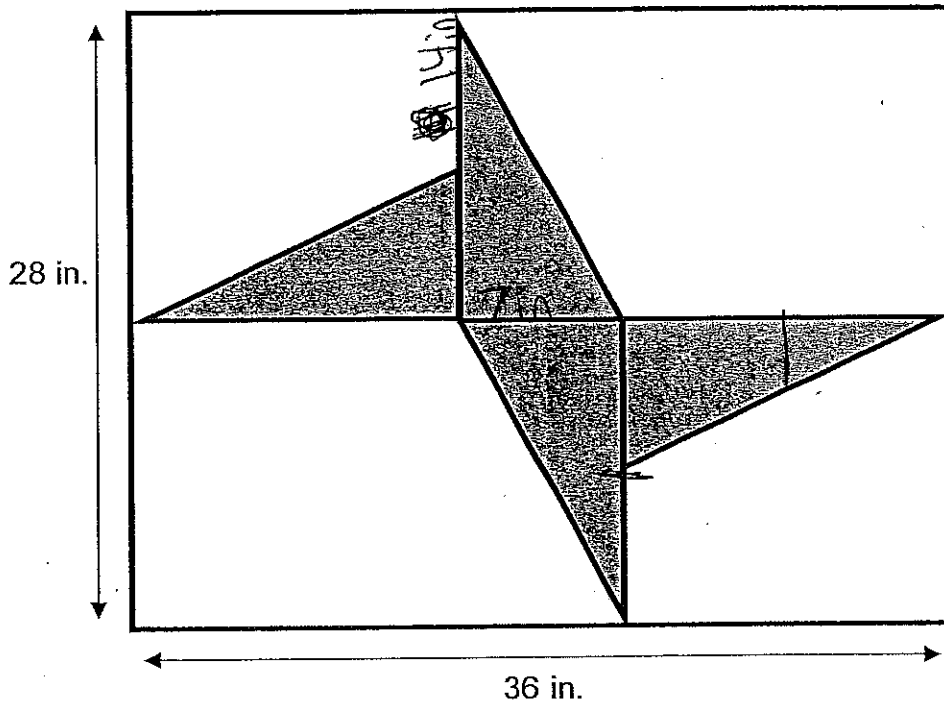
(a) 14 - height
 18 - base length
 12
 (b) 56 - area of triangle
 2×12 total area for a
 10 14 by 7 rectangle
 12

Explanation

First I drew a line on the opposite side of a triangle to make a rectangle. Then I "eyeballed" that the height of the rectangle was about 14 in. (by way). And since there were two heights were on opposite ends from the 36 in base of the rectangle and there was a small part separating them from each other I added the 2 heights then took 28 in away from 36 in. The difference was 8 in and that was the base. Next I multiplied 14 by 8 and the product was 112 . Then I divided 112 by 2 and got 56 . My conclusion is that the area of 1 triangle is 56 cm^2 .

Triangles

Four identical right triangles are arranged inside a rectangle as shown. The figure is not drawn to scale. What is the area of one of the right triangles?



Answer: 49 in²

Explain how you arrived at your answer.

First, I found out that half of 28 is 14 and that was my height because the triangle is half of the rectangular box. Then, I took the base of the triangle on the right and saw that it was about half of the length so the base is 7 in. Lastley, I took 14 and 7 and multiplied them and then divided the total by 2 and got my answer of 49 in².