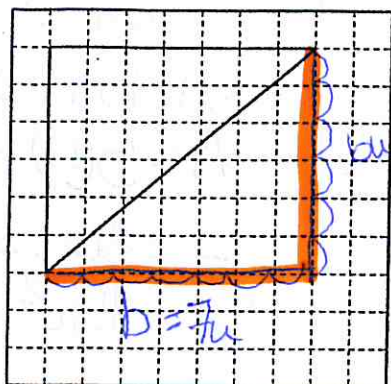


AREA OF TRIANGLES

If a line segment is drawn from one vertex of a rectangle to the opposite vertex, the area of the rectangle is divided into two equal triangles.

To find the area of a triangle, first find the rectangle which coincides with two of the triangle's sides. Draw in the rest of the rectangle. Then take $\frac{1}{2}$ of the area of the rectangle to find the area of the triangle.



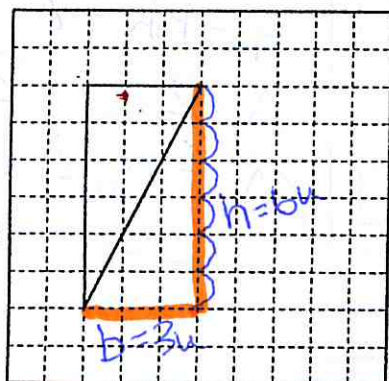
1. Draw the rectangle which coincides with two of the triangle's sides.

2. What is the area of the rectangle? $42u^2$

3. What is the area of the triangle? $21u^2$

$$\begin{aligned} A &= bh \\ A &= 7(6) \\ A &= 42u^2 \end{aligned}$$

$$\begin{aligned} A_{\Delta} &= 42 \div 2 \\ A &= 21u^2 \end{aligned}$$



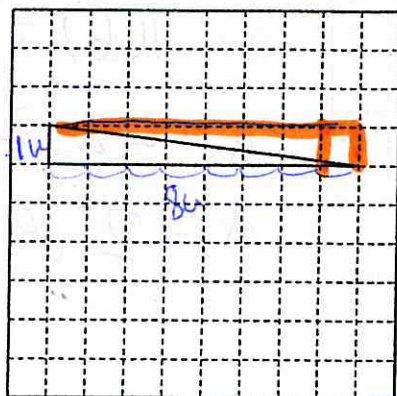
4. Draw the rectangle which coincides with two of the triangle's sides.

5. What is the area of the rectangle? $18u^2$

6. What is the area of the triangle? $9u^2$

$$\begin{aligned} A &= bh \\ A &= 3(6) \\ A &= 18u^2 \end{aligned}$$

$$\begin{aligned} A_{\Delta} &= 18 \div 2 \\ A_{\Delta} &= 9u^2 \end{aligned}$$



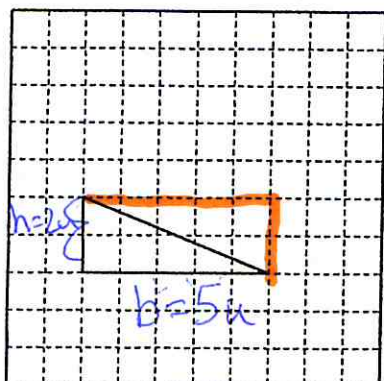
7. Draw the rectangle which coincides with two of the triangle's sides.

8. What is the area of the rectangle? $8u^2$

9. What is the area of the triangle? $4u^2$

$$\begin{aligned} A &= bh \\ A &= 1(8) \end{aligned}$$

$$A_{\Delta} = 8 \div 2$$



10. Draw the rectangle which coincides with two of the triangle's sides.

11. What is the area of the rectangle? $10u^2$

12. What is the area of the triangle? $5u^2$

13. What is the area formula for a rectangle? $A = bh$

14. What is the area formula for a triangle? $A = bh \div 2$ OR $A = \frac{1}{2}bh$ OR $A = \frac{bh}{2}$