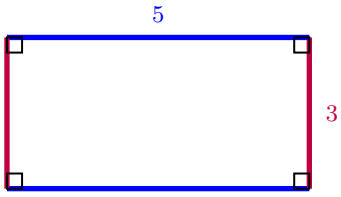
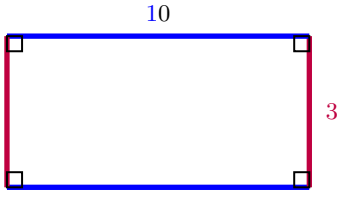
1. Find the area for the following shape.



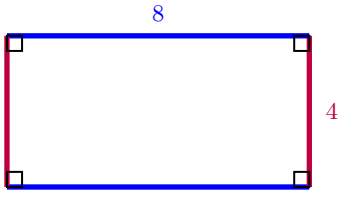
Solution: $A = bh = 5 \cdot 3 = 15$ square units

2. Find the area for the following shape.



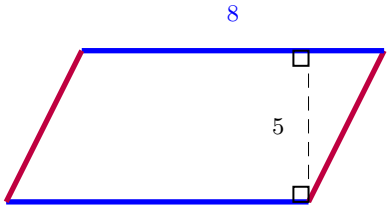
Solution: $A = bh = 10 \cdot 3 = 30$ square units

3. Find the area for the following shape.



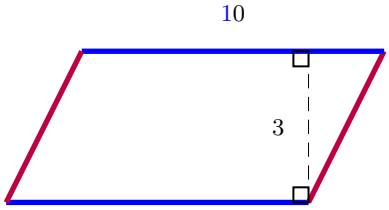
Solution: $A = bh = 8 \cdot 4 = 32$ square units

4. Find the area for the following parallelogram.



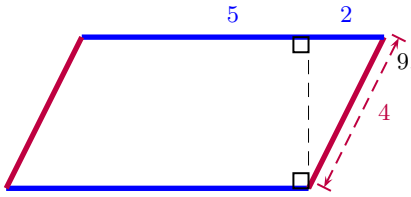
Solution: $A = bh = 8 \cdot 5 = 40$ square units

5. Find the area for the following parallelogram.



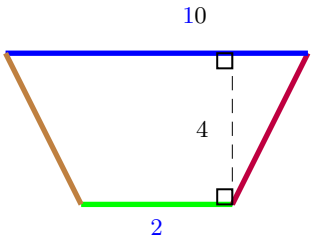
Solution: $A = bh = 10 \cdot 3 = 30$ square units

6. Find the area for the following parallelogram.



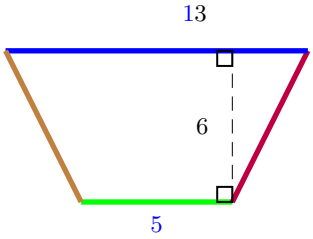
Solution: first find the height using pythagoras, $4^2 = h^2 + 2^2$, thus $h = \sqrt{12}$.... then... $A = bh = 7 \cdot \sqrt{12}$ square units

7. Find the area for the following trapezoid.



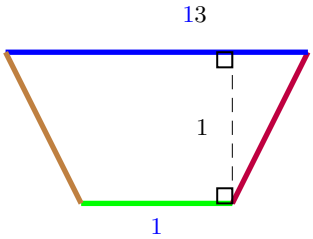
Solution: $A = (B + b)h/2 = \frac{(10+2)}{2} \cdot 4 = 24$ square units

8. Find the area for the following trapezoid.



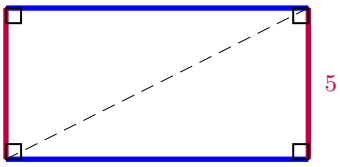
Solution: $A = (B + b)h/2 = \frac{(13+5)}{2} \cdot 6 = 54$ square units

9. Find the area for the following trapezoid.



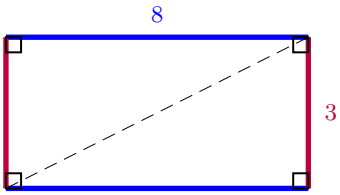
Solution: $A = (B + b)h/2 = \frac{(13+1)}{2} \cdot 1 = 7$ square units

10. Find the area for the following Rectangle.



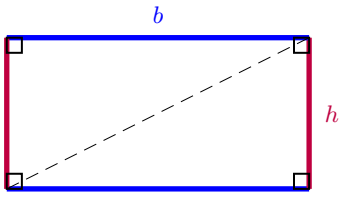
Now, use this area to calculate the area of each of the triangles inside the rectangle.

11. Find the area for the following Rectangle.

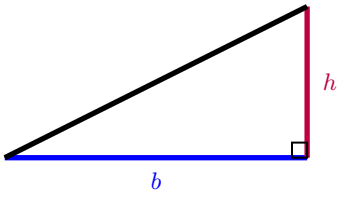


Now, use this area to calculate the area of each of the triangles inside the rectangle.

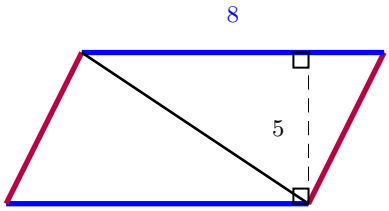
12. (**FAMOUS**) Find the area for the following Rectangle.



Now, use this area to calculate the area of each of the triangles inside the rectangle. use this to determine a formula for a triangle with the following shape

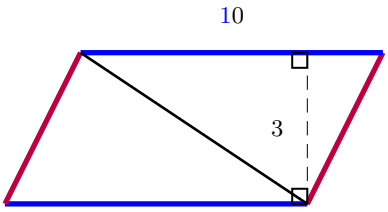


13. Find the area for the following parallelogram.



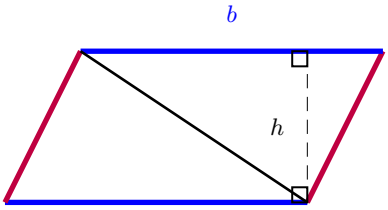
Now, use this area to calculate the area of each of the two large triangles inside the parallelogram.

14. Find the area for the following parallelogram.

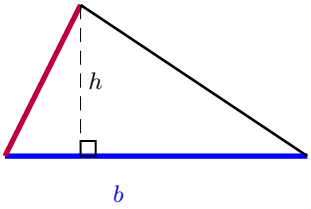


Now, use this area to calculate the area of each of the two large triangles inside the parallelogram.

15. **(FAMOUS)** Find the area for the following parallelogram.



Now, use this area to calculate the area of each of the two large triangles inside the parallelogram. Then, use this to determine a formula for the area of a triangle with the following shape.



Solution: see video lectures...

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