

Name: key

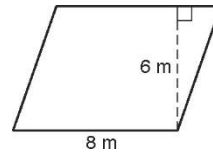
10.1 HOMEWORK  
TRIANGLES, PARALLELOGRAMS, AND TRAPEZOIDS



1. Find the area of a triangle with  $h = 4$  and  $b = 5$ .

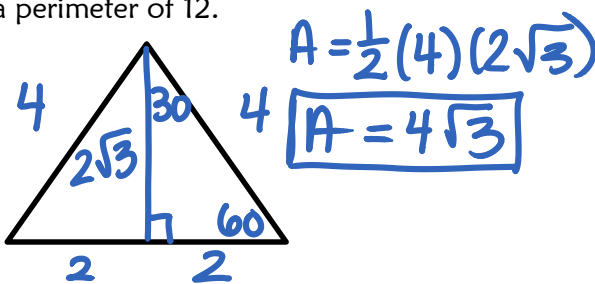
$$A = \frac{1}{2}bh$$
$$A = \frac{1}{2}(5)(4)$$
$$A = \frac{1}{2}(20)$$
$$\boxed{A = 10}$$

2. Find the area of a parallelogram.

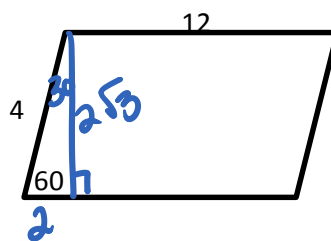


$$A = bh$$
$$A = (6)(8)$$
$$\boxed{A = 48}$$

3. Find the area of an equilateral triangle with a perimeter of 12.

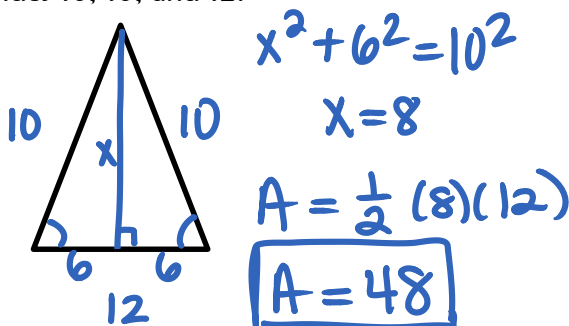


4. Find the area of the parallelogram.

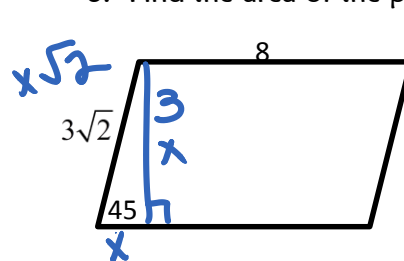


$$A = bh$$
$$A = (12)(2\sqrt{3})$$
$$\boxed{A = 24\sqrt{3}}$$

5. Find the area of an isosceles triangle with sides 10, 10, and 12.



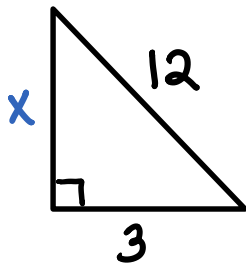
6. Find the area of the parallelogram.



$$x\sqrt{2} = 3\sqrt{2}$$
$$x = 3$$
$$A = bh$$
$$A = (8)(3)$$
$$\boxed{A = 24}$$



7. Find the area of the triangle.



$$x^2 + 3^2 = 12^2$$

$$x^2 = 135$$

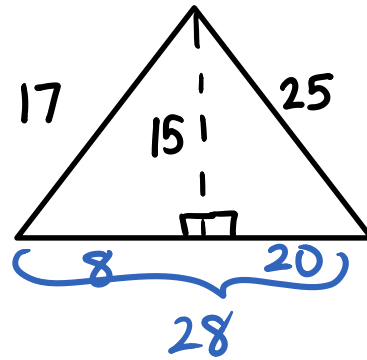
$$x = 11.62$$

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(3)(11.62)$$

$$A = 17.43$$

8. Find the area of the triangle.

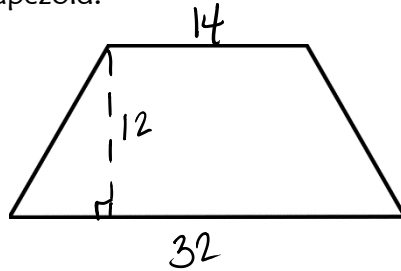


$$A = \frac{1}{2}bh$$

$$= \frac{1}{2}(28)(15)$$

$$A = 210$$

9. Find the area of the isosceles trapezoid.



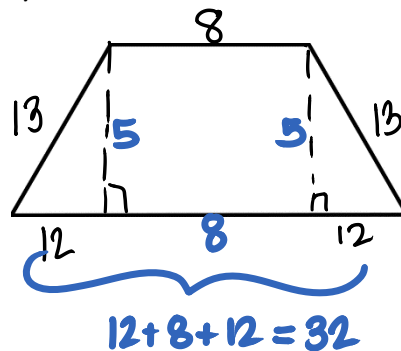
$$A = \frac{14+32}{2} \times 12$$

$$= \frac{46}{2} \times 12$$

$$= 23 \times 12$$

$$= 276 u^2$$

10. Find the area of the isosceles trapezoid.



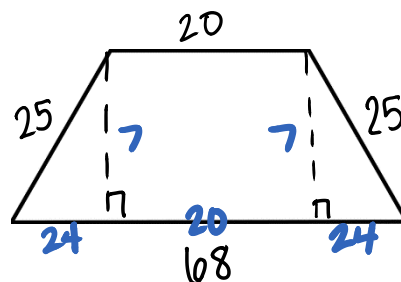
$$A = \frac{1}{2}(8+32) \cdot 5$$

$$= \frac{1}{2}(40) \cdot 5$$

$$= 20 \cdot 5$$

$$= 100 u^2$$

11. Find the area of the isosceles trapezoid.



$$A = \frac{1}{2}(20+68) \cdot 7$$

$$= \frac{1}{2}(88) \cdot 7$$

$$= 44 \cdot 7$$

$$= 308 u^2$$