

Name

Period

Int 2 Acc

**HW 1-2**  
**Solving with Area & Perimeter**

Unit 1

**#1-6: Solve each equation.**

1.  $4x - 21 = 15x - 4x$

2.  $-\frac{z}{4} + 9 = 11$

3.  $-2(4r + 6) = \frac{2}{3}(12r + 18)$

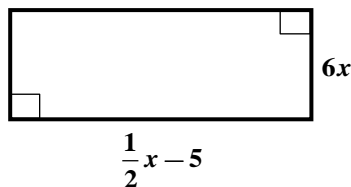
4.  $5(x + 4) + 1 = 4x - 12$

5.  $\frac{3m+4}{8} = \frac{3m+7}{5}$

6.  $\frac{2x+7}{4} - 8 = -3$

**#7-9: Set up an expression that would calculate the area/perimeter. Be sure to simplify your answer.**

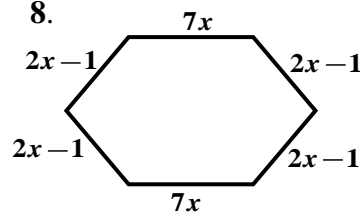
7.



Perimeter =

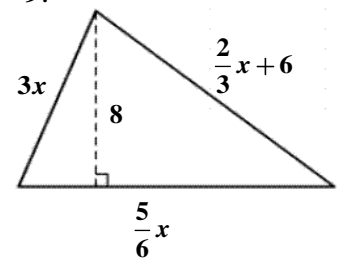
Area =

8.



Perimeter =


9.





Perimeter =


Area =

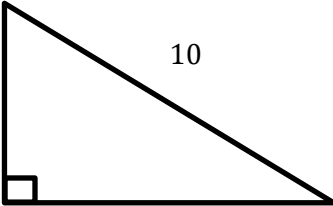
**#10-13: Find the value of  $x$  in each question.**

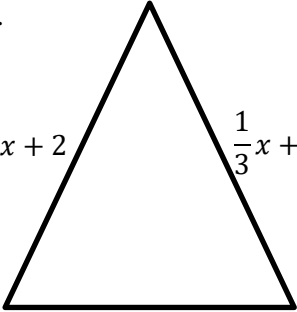
10.   
21 in  
 $x + 3$  in  
Perimeter = 56 in  
 $x = \underline{\hspace{2cm}}$

11.   
 $(3x - 7)$  ft  
7 ft  
Area = 56  $\text{ft}^2$   
 $x = \underline{\hspace{2cm}}$

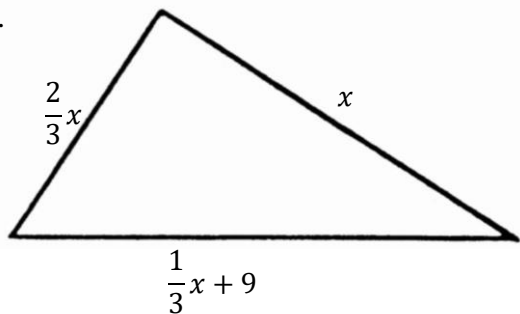
12.   
3  
 $4x$   
Perimeter = 20  $x$  units  
 $x = \underline{\hspace{2cm}}$

13.   
 $12x$  yds  
 $\frac{1}{3}$  yds  
Area = 24  $\text{yds}^2$   
 $x = \underline{\hspace{2cm}}$

14.   
8  
10  
 $6x$   
Area = 48  $\text{units}^2$   
 $x = \underline{\hspace{2cm}}$

15.   
 $\frac{1}{3}x + 2$   
 $\frac{1}{3}x + 2$   
 $\frac{1}{3}x$   
Perimeter = 7 units  
 $x = \underline{\hspace{2cm}}$

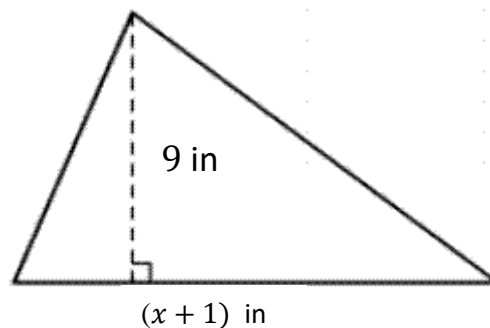
15.



$$\text{Perimeter} = 27 \text{ units}$$

$$x = \underline{\hspace{2cm}}$$

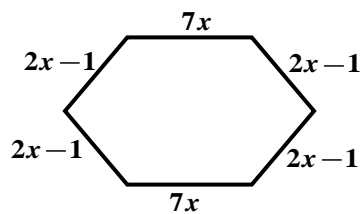
16.



$$\text{Area} = 63 \text{ in}^2$$

$$x = \underline{\hspace{2cm}}$$

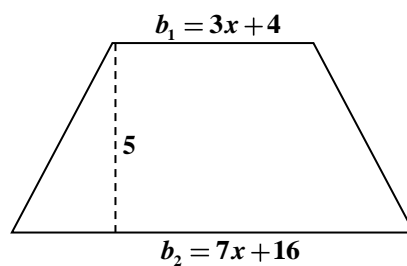
17.



$$\text{Perimeter} = 62 \text{ units}$$

$$x = \underline{\hspace{2cm}}$$

18.



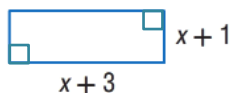
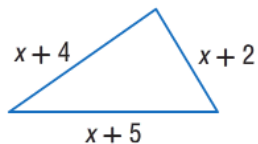
$$\text{Area of Trapezoid} = \frac{b_1 + b_2}{2} \cdot h$$

$$\text{Area} = 100 \text{ units}^2$$

$$x = \underline{\hspace{2cm}}$$

**#19-20: Write an equation to find the value of  $x$  so that each pair of polygons has the same perimeter. Then solve.**

19.



20.

