

Problem of the Day: Solve for x.

$$\frac{2x}{3} + 1 = \frac{5x}{6}$$

Plan for the Day: Integer quiz (if needed)  
 Go over last week's homework/Finish test (if needed)  
 Notes on area - review  
 Work on extra credit/homework  
 Homework Week 5 is due tomorrow  
 Objective: We will be able to find the area of shapes.  
 Today is National Comic Book Day!!

3.  $5 \cdot 5 + 5 - (-5)$   
 $\frac{25 + 5 - (-5)}{30 + 5 = 35}$

5.  $2x - 5 = -7x - 5$   
 $+7x \quad +7x$   
 $9x - 5 = -5$   
 $+5 \quad +5$   
 $9x = 0$   
 $\div 9 \quad \div 9$   
 $x = 0$

8.  $r = 9.4$   
 $d = 18.8 \pi$   
 $C = 59.032$   
 $\boxed{59.03 \text{ ft}}$

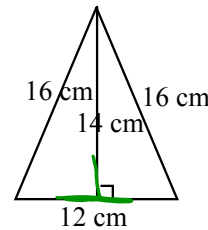
Area is the amount of space covered by a figure.

The units are always squared because you are looking at how many square units cover the area.

Area formulas:

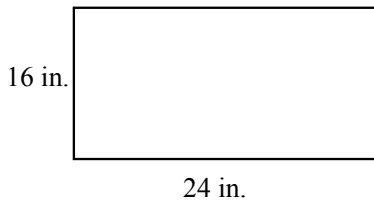
- Triangle  $A = 1/2bh$
- Rectangle  $A = bh$
- Trapezoid  $A = 1/2(b_1 + b_2)h$
- Circle  $A = \pi r^2$

Example 1: Find the area of the figure.



$A = \frac{1}{2}bh$   
 $A = \frac{1}{2} \cdot 12 \cdot 14$   
 $A = \frac{1}{2} \cdot 168$   
 $\boxed{A = 84 \text{ cm}^2}$

Example 2: Find the area of the figure.

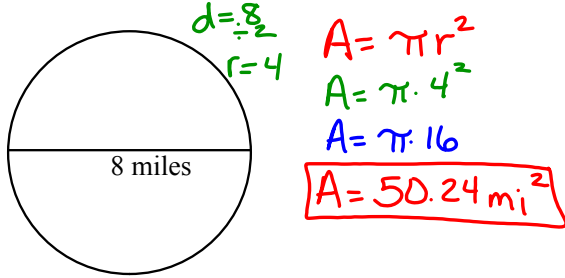


$A = bh$   
 $A = 24 \cdot 16$   
 $\boxed{A = 384 \text{ in}^2}$

Example 3: Find the area of the figure.

$A = \frac{1}{2}(b_1 + b_2)h$   
 $A = \frac{1}{2}(9 + 15) \cdot 10$   
 $A = \frac{1}{2} \cdot 24 \cdot 10$   
 $A = 12 \cdot 10$   
 $\boxed{A = 120 \text{ in}^2}$

Example 4: Find the area of the figure.

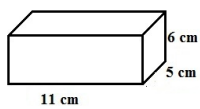


We can find the area of the base of three-dimensional figures by identifying the shape of the base.

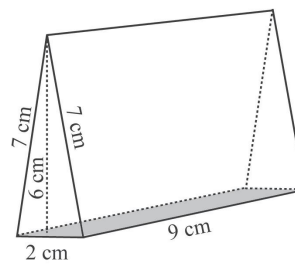
The shape of the base names the three-dimensional figure.

Example: A triangular prism has bases that are triangles.

Example 5: Find the area of the base.



Example 6: Find the area of the base.



Example 7: Find the area of the base.

