2.2
Translations

Warm Up - Review

Solve.

1. $x - 7 = -13$

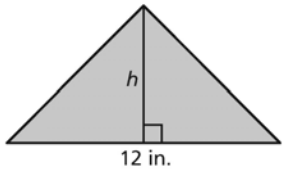
2. $15 - 3c = 3$

Warm Up - Review

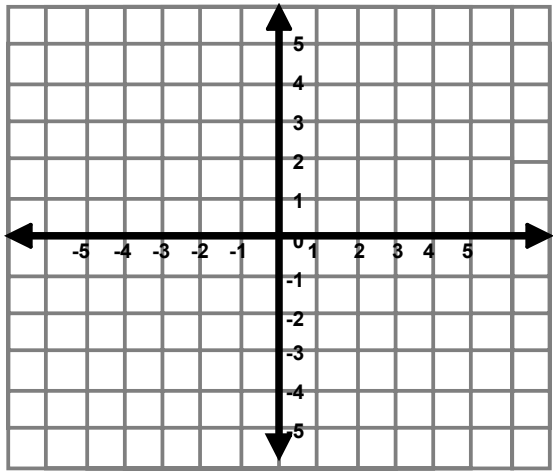
4. a. Write the formula for the area of a triangle.

b. Solve the formula for h.

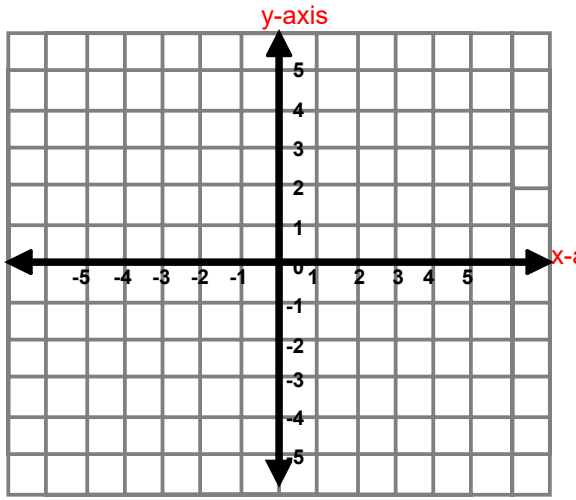
c. The area of a triangle is 36 square inches. Use the new formula to find the height of the triangle in inches



COORDINATE PLANE



COORDINATES



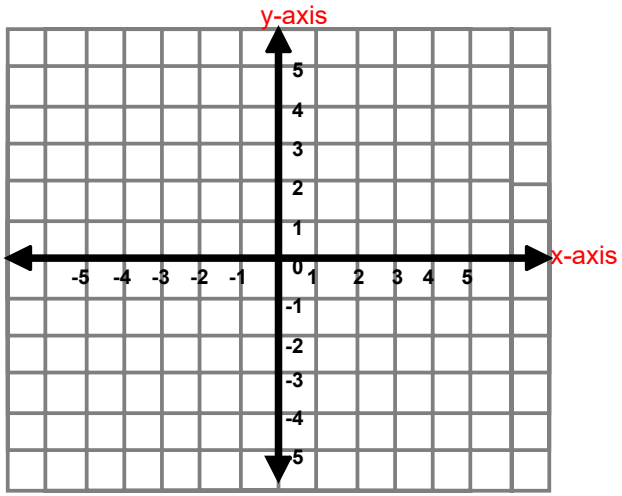
A(4,3)

B(-5,1)

C(2,-4)

D(3,0)

PLOTTING POINTS

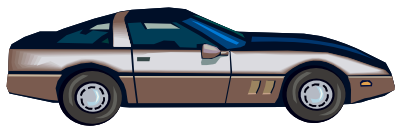


A(5,2)
B(-3,-4)
C(-1,5)
D(3,-5)
E(4,6)
F(0,0)
G(4,0)
H(0,-3)

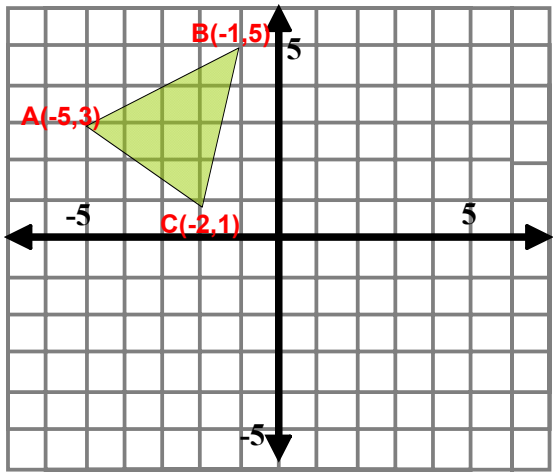
Vocabulary

Translation

Sliding a figure from one place to another



Translations on a Coordinate Plane



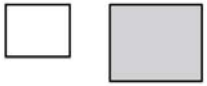
Rule:

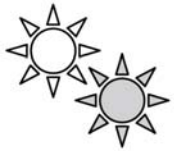
(x,y)→(x+6, y-5)

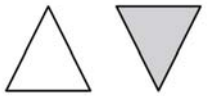
(x,y)→(x-8, y-2)

Practice

Tell whether the shaded figure is a translation of the nonshaded figure.

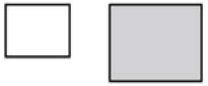
1. 

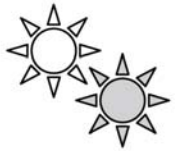
2. 

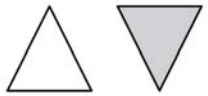
3. 

Practice

Tell whether the shaded figure is a translation of the nonshaded figure.

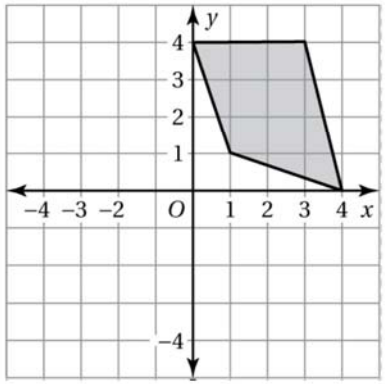
1. 

2. 

3. 

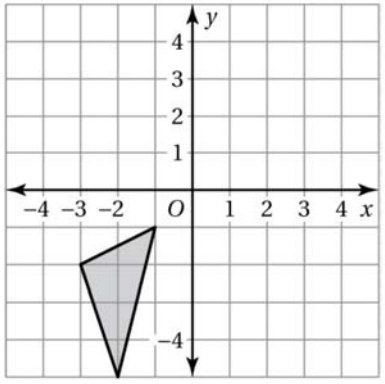
Practice

4. Translate the figure 4 units left and 1 unit down. What are the coordinates of the image?



Practice

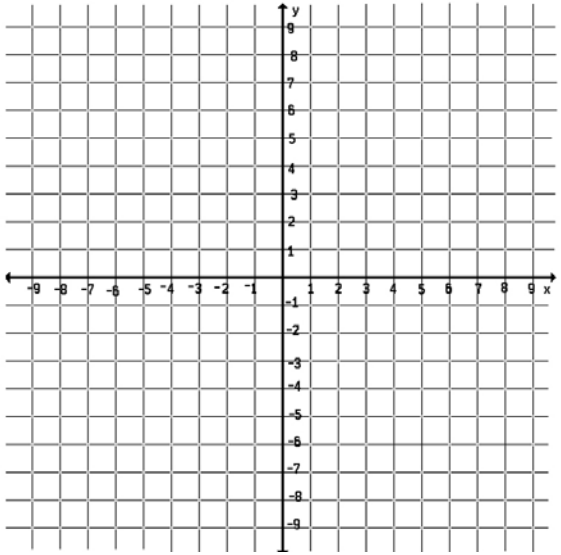
5. Translate the triangle 5 units right and 4 units up. What are the coordinates of the image?



Practice

The vertices of a triangle are $A(-2, 0)$, $B(0, 3)$, and $C(2, 2)$. Draw the figure and its image after the translation.

6. 4 units down



Practice

The vertices of a triangle are $A(-2, 0)$, $B(0, 3)$, and $C(2, 2)$. Draw the figure and its image after the translation.

7. 2 units right and 1 unit up