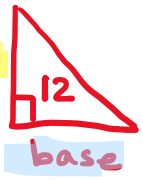
Name _____

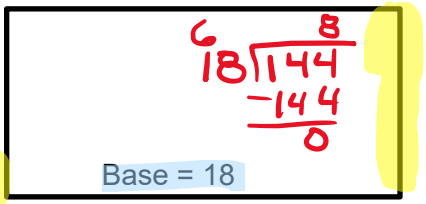
1 A triangle has an area of 12 square millimeters. What could be the measures of the base and height of the triangle in millimeters?

Select **all** the correct answers.

- Ⓐ $b = 2$ and $h = 6$
- Ⓑ $b = 3$ and $h = 8$
- Ⓒ $b = 4$ and $h = 3$
- Ⓓ $b = 6$ and $h = 4$
- Ⓔ $b = 12$ and $h = 2$



2 The sketch below shows a company's plans for a new billboard advertisement.

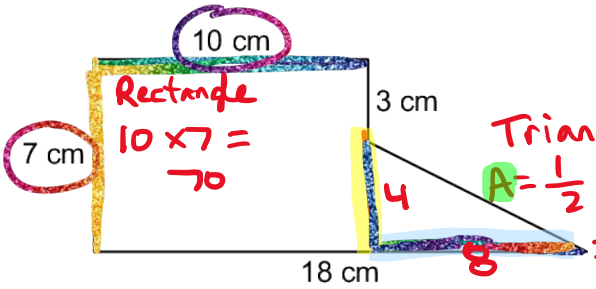


If the area of the billboard is 144 ft^2, what is the height?

- Ⓐ ~~18~~ ft
- Ⓑ ~~12~~ ft
- Ⓒ 8 ft
- Ⓓ 4 ft

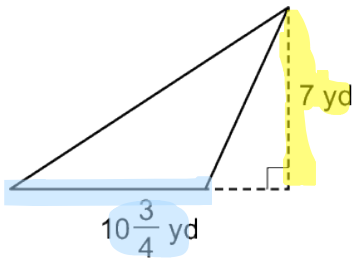
3 A parallelogram has a base of 9 km and a height of 5 km. What is the area of the parallelogram?

4 What is the area of the figure below?



- Ⓐ 82 cm^2
- Ⓒ 97 cm^2
- Ⓑ 86 cm^2
- Ⓓ 102 cm^2

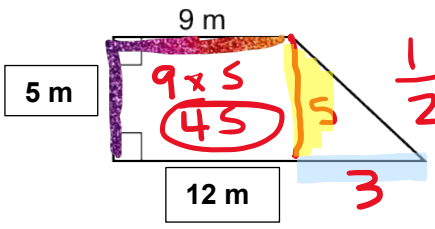
5 What is the area of the triangle in square yards?



Name _____

For triangles, if you are given the AREA and are looking for the BASE or HEIGHT, first multiply the AREA by 2, then divide by the given base or height.

6 What is the area of the composite figure in square meters?



$9 \times 5 = 45$

$\frac{1}{2}(5)(3)$

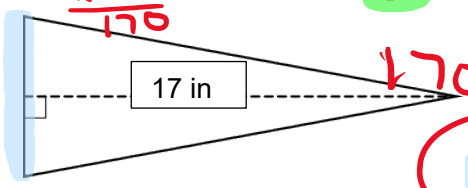
$\frac{1}{2}(15)$

$7\frac{1}{2}$

$45 + 7\frac{1}{2}$

$52\frac{1}{2}\ m^2$

8 Leilani hung a triangular pennant for her favorite baseball team in her room as shown below.



$85 \times 2 = 170$

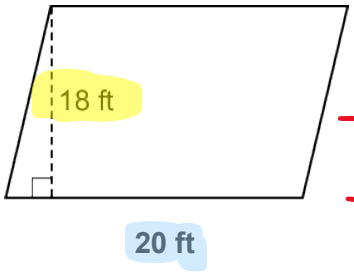
$85 = \frac{1}{2}(b)(17)$

$170 = b \cdot 17$

$10 = b$

If the area of Leilani's pennant is 85 in.^{2}, what is the measure of the base in inches?

7 The diagram below shows a banquet hall's plans to install a new dance floor.



$18 \times 20 = 360$

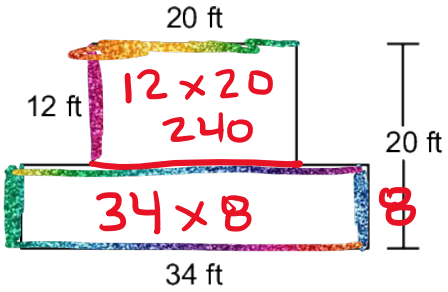
What is the area of the new dance floor in square feet?

Area = base × height

Area = 20 × 18

Area = 360 ft^2

Austin is helping his mom stain their wooden deck shown in the diagram below.



$20 \times 12 = 240$

$34 \times 8 = 272$

9 How many square feet of the deck do Austin and his mom need to stain?

$240 + 272 = 512\ ft^2$

10 If a can of stain covers 200 square feet, how many cans of stain will they need to buy to cover the entire deck?

1 → 200

2 → 400

3 → 600