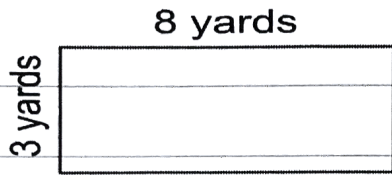


NAME _____ HW # 16

1. Find the area and perimeter of each figure



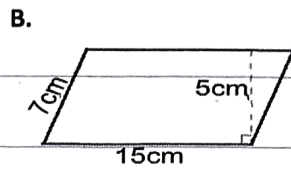
$$A = lw$$

$$A = (8)(3)$$

$$A = 24 \text{ yd}^2$$

$$P = 3 + 3 + 8 + 8$$

$$P = 22 \text{ yd}$$



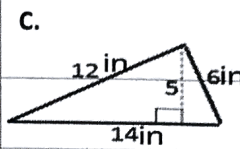
$$A = bh$$

$$A = (15)(5)$$

$$A = 75 \text{ cm}^2$$

$$P = 7 + 7 + 15 + 15$$

$$P = 44 \text{ cm}$$



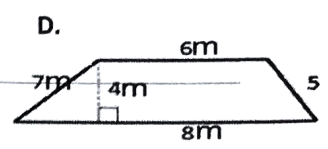
$$A = \frac{bh}{2}$$

$$A = \frac{(14)(5)}{2}$$

$$A = 35 \text{ in}^2$$

$$P = 12 + 14 + 6$$

$$P = 32 \text{ in}$$



$$A = \frac{(b_1 + b_2)h}{2}$$

$$A = \frac{(6 + 8)(4)}{2}$$

$$A = 28 \text{ m}^2$$

$$P = 6 + 8 + 7 + 5$$

$$P = 26 \text{ m}$$

2. Work backwards to solve each question. (Write down the formula first, then solve for the missing variable using equations).

A. Find the height of a triangle whose base is 14.5 cm and area is 133.4 cm^2 .

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

$$133.4 = \frac{1}{2}(14.5)h$$

$$\frac{133.4}{7.25} = \frac{7.25h}{7.25}$$

$$18.4 \text{ cm} = h$$

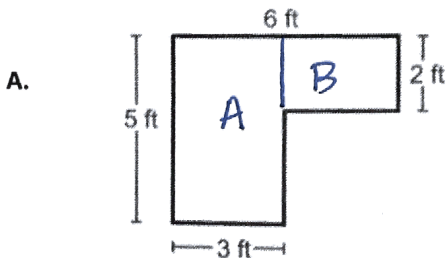
B. The length of a rectangular swimming pool is $15\frac{2}{3}$ ft. If the area of the swimming pool is $133\frac{5}{9}$ squared feet, find the width. Express answer as a mixed number.

$$A = lw$$

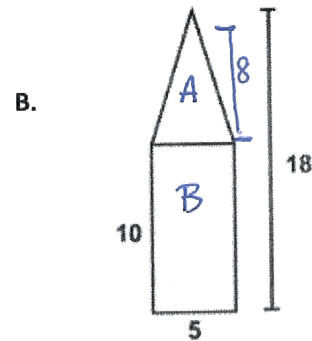
$$\frac{133\frac{5}{9}}{15\frac{2}{3}} = \frac{15\frac{2}{3}w}{15\frac{2}{3}}$$

$$8\frac{74}{141} \text{ ft} = w$$

3. Find the area of each composite figure.



<u>A</u>	<u>B</u>
$A = lw$	$A = lw$
$A = (5)(3)$	$A = (2)(3)$
$A = 15 \text{ ft}^2$	$A = 6 \text{ ft}^2$
$+$	
21 ft^2	



<u>A</u>	<u>B</u>
$A = \frac{1}{2}bh$	$A = lw$
$A = \frac{1}{2}(5)(8)$	$A = (10)(5)$
$A = 20 \text{ un}^2$	$A = 50 \text{ un}^2$
$+$	
70 un^2	