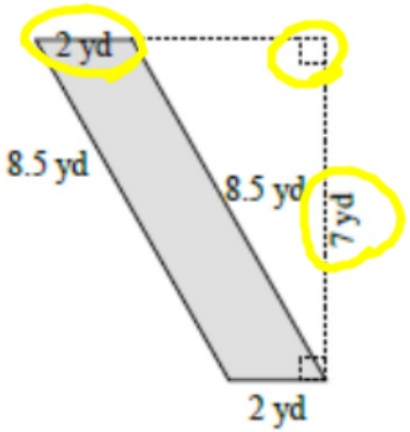
Chapter 9 Practice Test

Find the area of each figure

1.

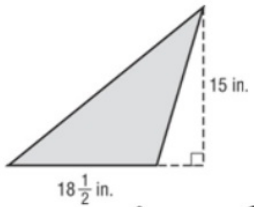


$A = bh$

$= (2)(7)$

$= 14 \text{ yd}^2$

2.



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

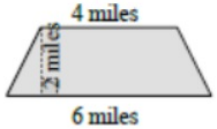
$= \left(\frac{1}{2}\right)\left(\frac{37}{2}\right)\left(\frac{15}{1}\right) = \frac{555}{4}$

$= 138\frac{3}{4}$

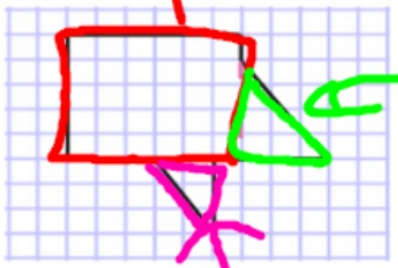
$36 + 1 = \frac{37}{2} = b$

$18\frac{1}{2}$

3.



4.

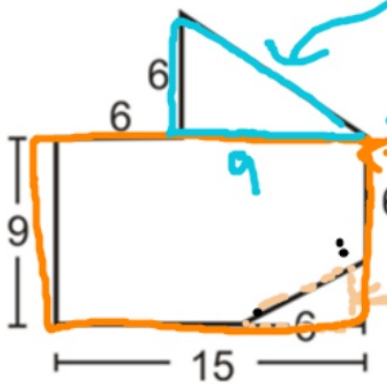


$6 \times 5 = 30$

$\frac{4 \times 3}{2} = \frac{12}{2} = 6$

$\frac{(3)(2)}{2} = \frac{6}{2} = 3$

$$\begin{array}{r} 30 \\ 6 \\ +\ 3 \\ \hline 39 \end{array}$$



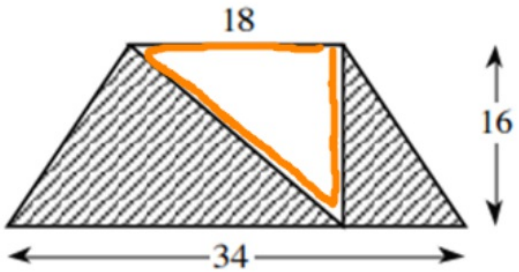
$\frac{1}{2}(9)(6) = 27$

$9 \times 15 = 135$

$\frac{1}{2}(6)(3) = 9$

$$\begin{array}{r} {\scriptstyle 1}\\ 27 \\ +135 \\ \hline 162 \\ -\ \ 9 \\ \hline 153 \end{array}$$

6. Find the area of the shaded region



Trapezoid

$A = \frac{1}{2}(18+34)16$

$\frac{1}{2}(52)(16)$

$= 416$

Triangle:

$\frac{1}{2}(18)(16)$

$\frac{1}{2}(288)$

$= 144$

$416 - 144 = 272$

7. A triangle has a base of 35 feet and an area of 385 square feet. What is the height of the triangle?

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

$$385 = \frac{1}{2}(35)(h)$$

$$770 = 35h$$

$$22 = h$$

6th Grade
Math

Name _____

Area : 5^2 or 25 times bigger

Parameter : 5 times bigger

8. Suppose the base, height, and sides of the parallelogram are multiplied by 5.

a. Find its original parameter and the new parameter.

Original:

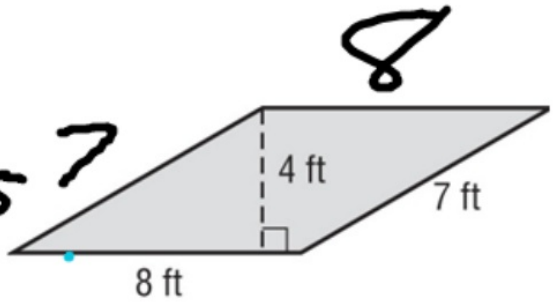
8+7+8+7 = 30

8+7+8+7 = 30

8 + 2 = 16

7 + 2 = 14

40+35+40+35 = 150



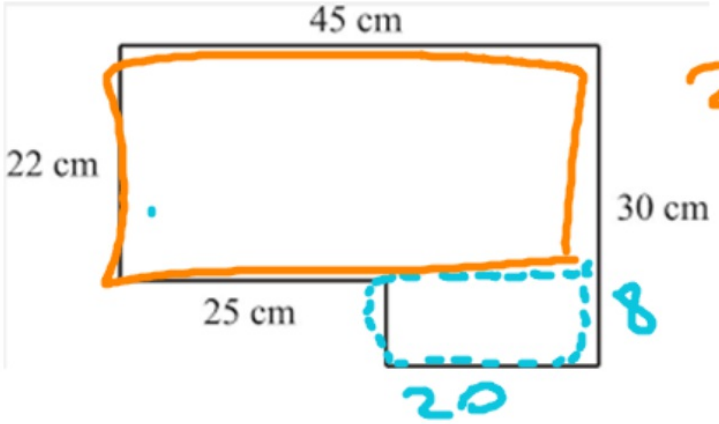
b. Find its original area and the new area.

A = 8 × 4 = 32

A = 40 × 20 = 800

Calculator

10. Find the area of the figure



22x45 = 990

8x20 = 160

990
+160
1150 cm²

11. A figure has vertices $W(2, 1)$, $X(4, 5)$, $Y(7, 5)$, and $Z(5, 1)$.

a. Graph the figure and state what type of a figure it is