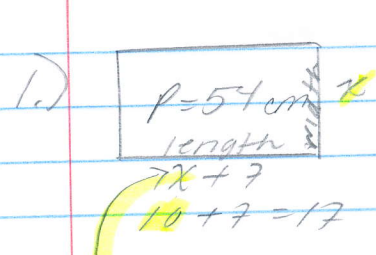


HVV Perimeter word Problems Nov. 5



$$P = 2l + 2w$$

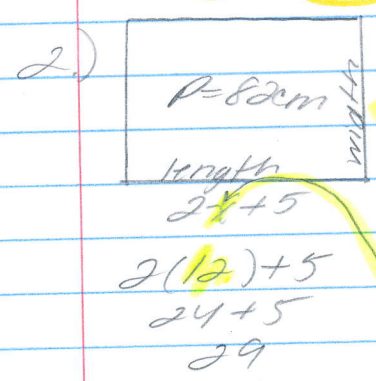
$$54 = 2(x+7) + 2x$$

$$54 = 2x + 14 + 2x$$

$$54 = 4x + 14$$

$$\begin{array}{r} 54 \\ -14 \\ \hline 40 = 4x \\ 4 \quad 4 \end{array}$$

Substitute $x = 10$
 ans: The width is 10cm & the length is 17cm.



$$P = 2l + 2w$$

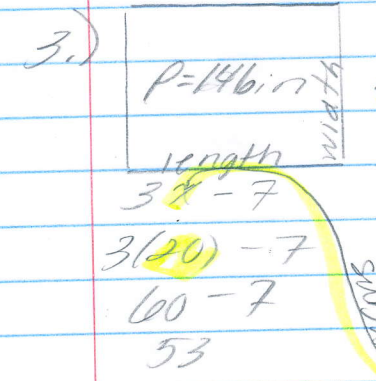
$$82 = 2(2x+5) + 2x$$

$$82 = 4x + 10 + 2x$$

$$82 = 6x + 10$$

$$\begin{array}{r} 82 \\ -10 \\ \hline 72 = 6x \\ 6 \quad 6 \end{array}$$

Substitute $x = 12$
 ans: The width is 12cm & the length is 29cm.



$$P = 2l + 2w$$

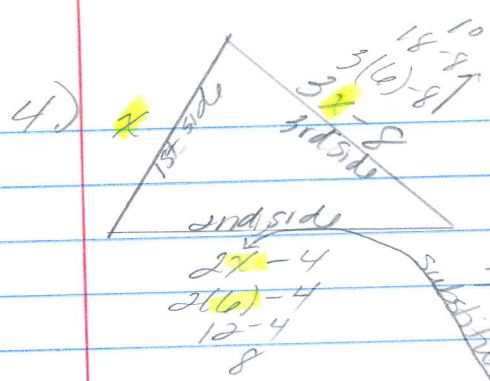
$$146 = 2(3x-7) + 2x$$

$$146 = 6x - 14 + 2x$$

$$146 = 8x - 14$$

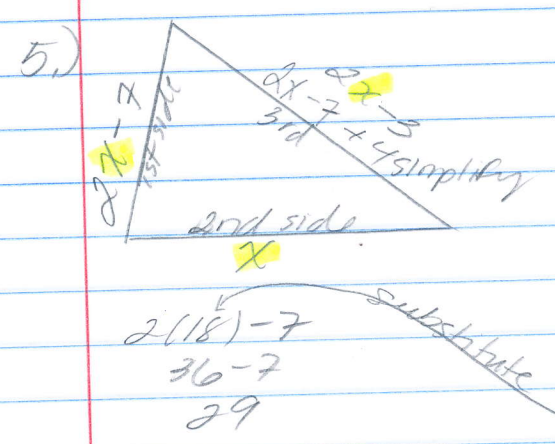
$$\begin{array}{r} 146 \\ +14 \\ \hline 160 = 8x \\ 8 \quad 8 \end{array}$$

Substitute $x = 20$
 ans: The width is 20in & the length is 53in.



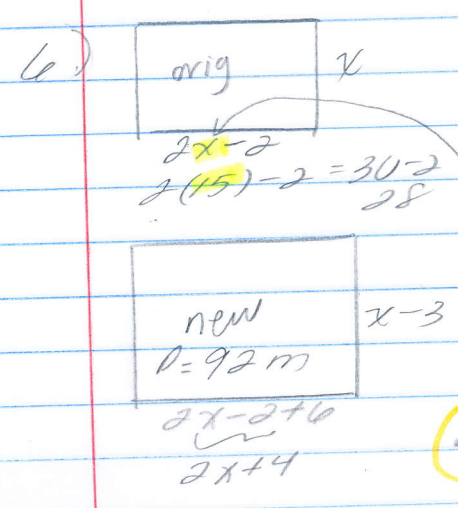
P = add up all sides
 $24 = x + (3x - 8) + (2x - 4)$
 $24 = 6x - 12$
 $36 = 6x$
 $x = 6$

ans:
 1st side = 10 in
 2nd side = 8 in
 3rd side = 6 in



P = add up all sides
 $80 = 2x - 7 + x + 2x - 3$
 $80 = 5x - 10$
 $90 = 5x$
 $x = 18$

ans:
 1st side = 29 cm
 2nd side = 18 cm
 3rd side = 33 cm



P = 2l + 2w
 $92 = 2(2x + 4) + 2(x - 3)$
 $92 = 4x + 8 + 2x - 6$
 $92 = 6x + 2$
 $90 = 6x$
 $x = 15$

orig: width = 15 m
 length = 28 m