


Warmup #2

HW → name on it & turn
in to front basket

1. Write an expression in simplest form to represent the perimeter of each figure below.

$6x - 2$




$4x + 3$

$20x + 2$

$4x - 7$

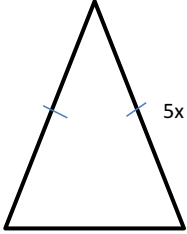
add up all sides



$2x + 5$

$2x$

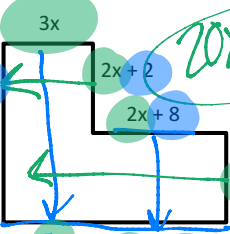
$16x - 4$



$5x - 4$

$3x + 2$

$13x - 6$



$3x$

$2x + 2$

$2x + 8$

$3x$

$5x + 8$


$3x$

$2x + 2$

$20x + 20$

2. Write an expression in simplest form to represent the area of each figure below.

$3x + 3$




$2x + 5$

| | | |
|--------|------|------|
| $2x$ | $3x$ | 3 |
| $6x^2$ | $6x$ | $6x$ |
| $15x$ | 15 | |

$6x^2 + 21x + 15$

$x + 4$

low

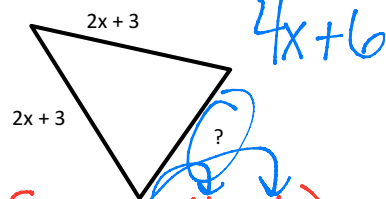
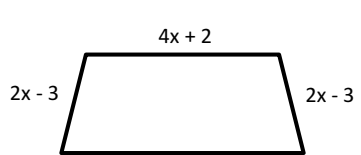

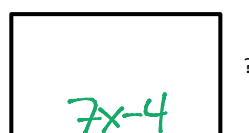


$3x - 2$

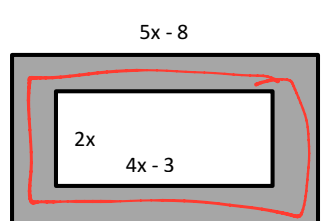
| | | |
|------|--------|-------|
| | x | 4 |
| $3x$ | $3x^2$ | $12x$ |
| -2 | $-2x$ | -8 |

$3x^2 + 10x - 8$

3. Find the missing side length using the given perimeter.

| | |
|--|--|
| <p>$P = 5x + 10$</p>  <p>$5x + 10 - (4x + 6)$ $5x + 10 - 4x - 6$ $x + 4$</p> | <p>$P = 12x + 4$</p>  <p>$8x - 4$ $12x + 4 - (8x - 4)$ $12x + 4 - 8x + 4 = 4x + 8$</p> |
| <p>$P = 48x + 8$</p>  <p>$8x$ $48x + 8 - 8x$ $\frac{40x + 8}{2} \rightarrow 2 \text{ sides}$ $20x + 4$</p> | <p>$P = 24x - 4$</p>  <p>$14x - 8$ $24x - 4 - (14x - 8)$ $24x - 4 - 14x + 8$ $\frac{10x + 4}{2} \in 5x + 2$</p> |

4. Find the area of the shaded region.



Shady

$$2x \begin{matrix} 5x - 8 \\ 10x^2 - 16x \\ 6(30x - 48) \\ 10x^2 + 14x - 48 \end{matrix}$$

unshady

$$2x(4x - 3)$$

$$8x^2 - 6x$$

Shady - unshady

$$10x^2 + 14x - 48 - (8x^2 - 6x)$$

$$2x^2 + 20x - 48$$

Name

$$2x(x+1)(3x-7)$$

Combine

$$44x - 12y + 3(x+y) - 40 \\ + 12x - 10(x-4y)$$

Perimeter of
equilateral $\Delta = 12x + 8$

$$\text{base} = 6x - 12$$

Find the legs