Practice Test Review

Level 7, Module 3, Topic A Quiz 3

Item 1

Enter an expression equivalent to $-\frac{1}{10}(10x - 5y - 20) + 4\left(\frac{1}{6}y - 3\right)$ by using the fewest terms possible.

$-\frac{1}{10}(10x + (-5y) + (-20)) + 4(\frac{1}{6}y - 3)$

$-\frac{1}{10} \cdot 10x + (-\frac{1}{10} \cdot -5y) + (-\frac{1}{10} \cdot -20) + (4 \cdot \frac{1}{6}y) + (4 \cdot -3)$

$-x + \frac{1}{2}y + 2 + \frac{4}{6}y - 12$

$-x + (\frac{1 \times 3}{2 \times 3}y + \frac{4}{6}y) + (2 - 12)$

$-x + (\frac{3}{6} + \frac{4}{6}y) - 10$

$-x + \frac{7}{6}y - 10$

$-x + \frac{7}{6}y - 10$

Item 2

Eve writes the expression $(6y - 12x) - 3\left(x - \frac{7}{3}\right) + 4y$ by using the fewest terms possible.

Her work is shown.

Line 1: $6y - 12x - 3x + 7 + 4y$ ✓

Line 2: $6y - 9x + 7 + 4y$ ✗ should be $6y - 15x + 7 + 4y$

Line 3: $6y + 4y - 9x + 7$

Line 4: $10y - 9x + 7$

Eve says $(6y - 12x) - 3\left(x - \frac{7}{3}\right) + 4y$ can be written as $10y - 9x + 7$, but her statement is incorrect.

Part A

In which line of Eve's work did she make a mistake?

Line 1

Line 2

Line 3

Line 4

Part B

What should Eve's final expression be after she simplifies the original expression? Enter the expression using the fewest terms possible.

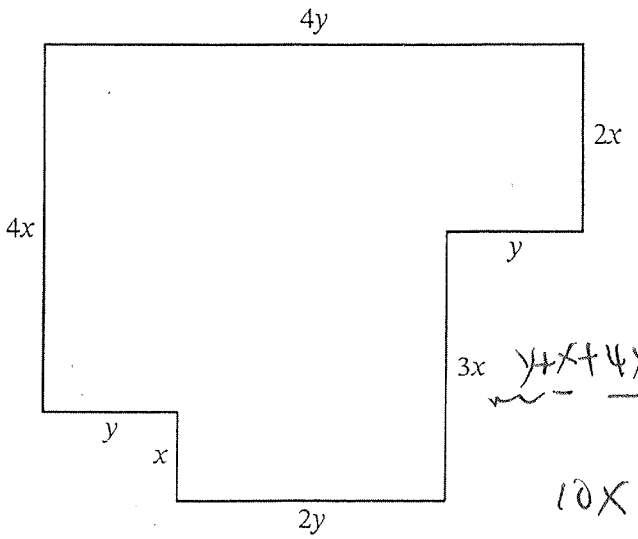
$6y - 15x + 7 + 4y$

$-15x + 10y + 7$

$-15x + 10y + 7$

Item 3

Consider the figure shown.



y+x+4x+4y+2x+y+3x+2y

10x + 8y

Does each expression represent the perimeter of the figure? Select Yes or No.

Expression	Yes	No
$2x\,(9y)$		X
$5x + 5x + 4y + 4y$	X	
$4\,(x + y) + 4y$		X
$2x + 2x + 2x + 2x + 8y$		X
$2\,(5x + 4y)$	X	
$10x + 8y$	X	

Item 4

Enter one value from the given answer choices in each box to make the statement true.

12(2h+1) - 6

24h + 12 - 6

24h + 6

3(8h+2) = a(8h+b)

Answer Choices

2 3 4 6 8 12 24

The expression $12\,(2h + 1) - 6$ is equivalent to $a\,(8h + b)$ when $a =$ 3 and $b =$ 2.

Item 5

A box of chalk has y yellow pieces, w white pieces, p pink pieces, and g green pieces. Pedro buys 3 boxes of chalk. Which expressions represent the total number of pieces of chalk he buys? Select **all** that apply.

$y + w + p + g$

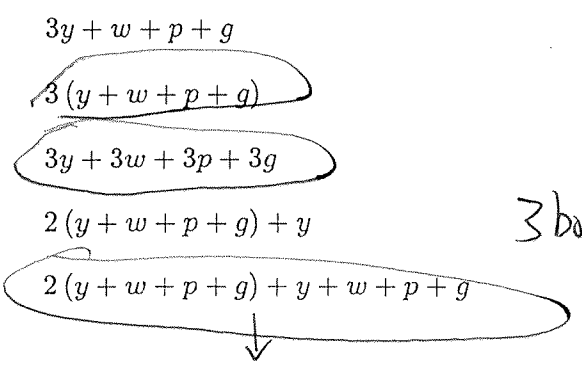
$3y + w + p + g$

$3(y + w + p + g)$

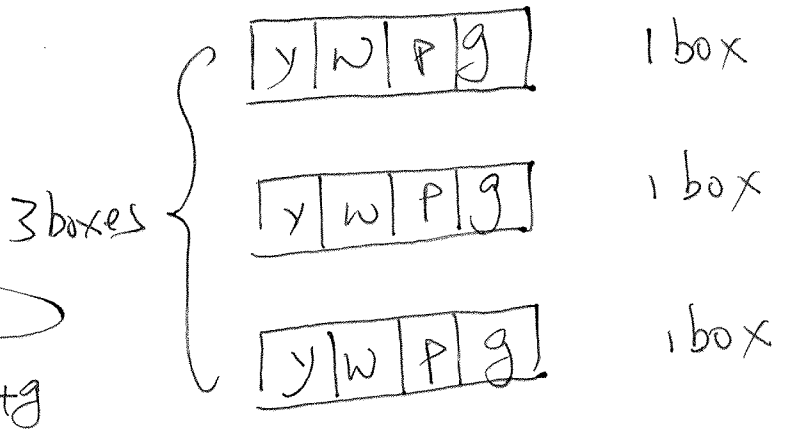
$3y + 3w + 3p + 3g$

$2(y + w + p + g) + y$

$2(y + w + p + g) + y + w + p + g$



$2y+2w+2p+2g+y+w+p+g$



$2y+y+2w+w+2p+p+2g+g$

① $3(y+w+p+g)$

$3y+3w+3p+3g$

② $3y+3w+3p+3g$