

3.1. Variables

Dec. 12, 2006

Alliance grows in Population
By 350 people a year. Currently
the Population is 155,000.

$$\begin{array}{rclcl} \text{Int. Pop.} & + & 350 \cdot \text{years} & = & \text{New Pop.} \\ 155,000 & + & 350 \cdot 1 & = & 155,350 \\ 155,000 & + & 350 \cdot 2 & = & 155,700 \\ \vdots & & \vdots & & \vdots \\ 155,000 & + & 350 \cdot y & = & \underline{\underline{155,000 + 350y}} \end{array}$$

- Coefficient: The Number
in front of ~~with~~ the variable. *comb. like terms*

$4x$	\rightarrow	<u>Coeff</u> 4
$-5x$	\rightarrow	-5
$\frac{15}{2}x$	\rightarrow	$\frac{15}{2}$
x	\rightarrow	1

Add Variable
by Adding
the Coefficient
if the Variables
are the Same &
the exponents are
the same.

Simplify:

$$\begin{aligned} 2 \cdot 3 &= 6 \\ 3 + 3 &= 6 \end{aligned}$$

$$\begin{aligned} 2(-5y) &= \underline{\underline{-10y}} \\ -5y - 5y &= \underline{\underline{-10y}} \end{aligned}$$

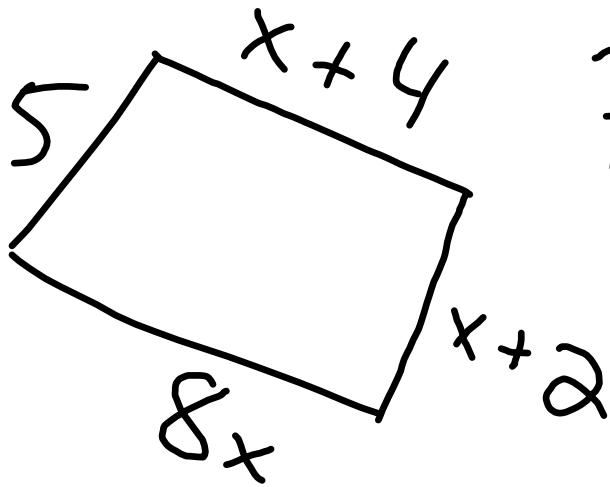
$$\begin{aligned} &= 5b + 3b = \underline{\underline{-2b}} \quad \left. \vphantom{= 5b + 3b} \right\} 4c + 2c = \underline{\underline{6c}} \end{aligned}$$

$$\begin{aligned} 5x - (2x - 5) \\ 5x - (2x) \ominus (5) \\ \underline{5x} - \underline{2x} + 5 \\ \underline{\underline{3x + 5}} \end{aligned}$$

$$\begin{aligned} -(a+b) \\ = \\ -a-b \end{aligned}$$

Find the Perimeter.

Distance around. "Outside"



$$P = \underline{x+4} + \underline{x+2} + \underline{8x} + \underline{5}$$
$$= \underline{\underline{10x+11}}$$

O.T.L.

Pg 76: Exp. 1-15(0)

Written: 1-43 (e.o.o)

1, 5, 9, 13, 17, 21, ...