Get out your homework and start checking your answers. We will have a target check Monday.

Classwork - Combining Like Terms

A) $7b + 15 - 3b$

$4b + 15$

B) $-10 + 5x - 3$

$5x - 13$

OR

$-13 + 5x$

C) $-2x + 5x - 3$

$3x - 3$

$-3 + 3x$

D) $3a - 7 + 1$

$3a - 5$

E) $-4v + 7 + 2v$

$-2v + 7$

F) $6x - 8 - 9x$

$-3x - 8$

G) $6a - 5b - 3b + 2a$

$8a - 8b$

H) $5t + 7 - 10t + 1$

$-5t + 8$

I) $-2x + 4y - 6x + 3y$

$-8x + 7y$

You have been working with expressions where you have combined like terms.

Vocabulary
Like Terms – Terms that have the exact same variable
Terms that have no variables

← Constant

In the following examples:
  A) Put each term to the appropriate category. (terms with exact same variable and/or terms with no variable)
  B) Circle/box like terms -- include the + or – sign in front of it.

A) 8x + 5 – 2x

6x + 5

Terms with exact same variable	Terms with no variable
8x −2x	+5

B) 3 – 2x + 7

−2x + 12

OR

12 − 2x

Terms with exact same variable	Terms with no variable
−2x	5 +7

C) 10x – 3x + 10y – 6y

7x + 4y

Terms with exact same variable	Terms with exact same variable
10x − 3x	+10y −6y

D) 12d – 7d + 5t – 3t

5d + 2t

Terms with exact same variable	Terms with exact same variable
12d −7d	+5t − 3t

E) $9x + 3 - 2x - 6$

Like terms
$9x$
$-2x$

$7x - 3$

Like terms
3
-6

F) $-8m - 2n + 5m + 7n$

Like terms
$-8m$
$+5m$

$-3m + 5n$

Like terms
$-2n$
$+7n$

G) $4h - 6h + 11 - 8h$

Like terms
$4h$
$-6h$
$-8h$

$-2h + 11 - 8h$

$-10h + 11$

Like terms
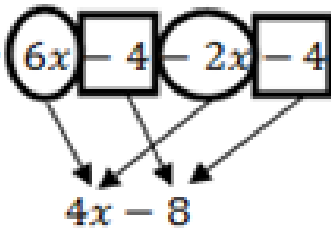$+11$

H) $2n - 4p - 7n + 4p$

Like terms
$2n$
$-7n$

$-5n + 0p$

$-5n + 0$

$-5n$

Like terms
$-4p$
$+4p$

Create an expressions using 3-4 terms with variable and/or non-variable terms that would have the following simplified answer. There is more than one possible expression.

Example: $4x - 8$ → A possible expression that would simplify to $4x - 8$ could be → $6x - 4 - 2x - 4$

Hint: You are just thinking backwards

$4x - 8$

$6a + 10$ $-5x - 4$ $2y - 6$ $-4x + 2y$

$7x - 9$ $-n + 3$ $2m$ $-10c + 5d$

Simplify each expression to decide whether the 2 expressions are equivalent or not. Show work to prove your answer. _Equivalent expressions have the same simplified expression after you combine like terms._

A)

Expression #1

$(2x) - 5 + 3x$

$5x - 5$

(Circle Your Answer)

~~Equivalent~~ (circled)

Not Equivalent

Expression #2

$4 + 5x - 9$

$-5 + 5x$ OR $5x - 5$

B)

Expression #1

$6n - 2 + 4n + 5$

$10n + 3$

(Circle Your Answer)

Equivalent

~~Not Equivalent~~ (circled)

Expression #2

$-8n - 3 + 2n$

$-6n - 3$

C)

Expression #1

$x - 4y - 3x + 7y$

$-2x + 3y$

(Circle Your Answer)

Equivalent

~~Not Equivalent~~ (circled)

Expression #2

$-y - 5x - 2y + 3x$

$-y \rightarrow -1y$

$-2x - 3y$ OR $-3y - 2x$

D)

Expression #1

$11g - 5 - 7g + 3$

$4g - 2$

(Circle Your Answer)

~~Equivalent~~ (circled)

Not Equivalent

Expression #2

$-g + 6 + 5g - 8$

$4g - 2$