

Writing Expressions

9/10

There are several key words that indicate that a particular operation is being used.

p. 65

Key Words for Operations			
Addition	Subtraction	Multiplication	Division
<ul style="list-style-type: none"> added to plus sum more than 	<ul style="list-style-type: none"> subtracted from minus difference less than take away taken from 	<ul style="list-style-type: none"> times multiplied by product of groups of 	<ul style="list-style-type: none"> divided by divided into quotient of ratio of <p>how many times more</p>

Expression - NO Equal Sign - Contains:

- at least 1 operation
- Numbers & Variables

ex) $x + 3$

2
NO!

$\frac{1}{2}x$

$2 + x = 5$
equation

$2x^2 + 3x - 5$

Sep 8-2:29 PM

1. Three times a number plus 5.

$3x + 5$

2. The quotient of a # and 11 minus 7

$\frac{x}{11} - 7$

3. Two less than the Sum of a # and 8.

$(x + 8) - 2$

* Turn around words *
Than

From → Take 5 from 8 $8 - 5$

Sep 14-8:31 AM

Write and expression:

You buy n cartons of tennis balls at \$25 per carton. There is an 8% sales tax and a \$17 shipping fee. Write an expression to represent the total cost of n cartons.

Handwritten work for the tennis balls problem:

- Initial expression: $(1.08)25n + 17$
- Annotations:
 - 25×0.08 with a '2' and 'tax' below it.
 - $25(1.08)$ with '\$27 per Carton' below it.
 - Arrows pointing from '8% sales tax' to '0.08' and from '0.08' to '1.08'.
 - Labels 'Cost per Carton' and 'Shipping fee' pointing to $25n$ and $+17$ respectively.
- Final expression in a cloud: $27n + 17$
- Bottom left note: 'Total per Carton \$27' with an arrow pointing to the '27' in the cloud.

Sep 9-8:40 AM

Six friends all order the same lunch at c dollars a piece plus 5% tax and 20% tip. They have a \$10 gift card. Write an expression to represent the total cost they each paid.

Handwritten work for the lunch problem:

$$6c + .05(6c) + .20(6c) - 10$$

$$6c + .3c + 1.2c - 10$$

$$7.5c - 10$$

Sep 9-8:50 AM

Evaluating Expressions* USE PEMDAS *Evaluate if $a=3$ $b=-2$ $c=1/2$

$$\begin{aligned} \text{dx) } & 2a - 3b \\ & 2(3) - 3(-2) \\ & 6 + 6 \rightarrow 12 \end{aligned}$$

$$\begin{aligned} & 4c + 5b^2 \\ & 4(1/2) + 5(-2)^2 \\ & 2 + 20 \\ & 22 \end{aligned}$$

Sep 9-8:59 AM

$$a=3 \quad b=-2 \quad c=1/2$$

$$a^4(10c)$$

$$\begin{aligned} & 3^4(10)(1/2) \\ & 405 \end{aligned}$$

$$\frac{2a-b}{6c}$$

$$\frac{(2(3) - -2)}{6(1/2)} = 2.\bar{6} \text{ or } 8/3$$

Sep 9-9:06 AM