

Name A Key

Date _____

Expressions Review Packet

- 1) Write a dialogue for each expression.

(from our menu! ①)

a) $3f + 2h + 5m$

Three front fries, 2 hamburgers and 5 Medium drinks, please.

b) $2(c + 3f + 1) - f = 2c + 6f + 2 - f = [2c + 5f + 2]$

2 orders of a cheeseburger, three fries, and a dollar tip) oh wait - take off a fry!

c) $3(2f + 5h + 2m + 3x + 4) = [6f + 15h + 6m + 9x + 12]$

Three orders of 2 fries, 5 hamburgers, 2 medium drinks, 3 x-tra large drinks, and 4 dollar tip.

- 2) Evaluating Expressions

Input the values and simplify using Order of Operations (PEMDAS/GEMS)

m	$m + 5$
3	8
5	10
32	37

$$3+5$$

$$5+5$$

$$32+5$$

d	$d \div 2$
4	2
14	7
22	11

$$4 \div 2$$

$$14 \div 2$$

$$22 \div 2$$

n	$4n + 3.2$
4	19.2
7	31.2
10	43.2

$$16 \div 3.2$$

$$28 \div 3.2$$

$$40 \div 3.2$$

3) Verbal Phrases

Writing Expressions:

a) 3 more than a number $n+3$

b) The sum of 6 and a number $6+n$

c) Half of a number $n \div 2$

or $\frac{n}{2}$

d) Jane is twice as old as Ed $2e$

or $J = 2e$

e) 31 less than a number $n-31$

f) Read 9 pages a day for d days $9d$

4) Combine Like Terms

Only combine terms that are 'alike'. Use Highlighters and/or colored pencils.

Only use an exponent if the variables are being multiplied

a) $4x + 3x + 7 + 2$

$7x + 9$

b) $7x + 2y + 3x + 2 + y$

$10x + 3y + 2$

c) $6m + 12 - 2m - 1$

$4m + 11$

d) $4x^2 + 3x + 7x^2 + 2x$

$11x^2 + 5x$

f) $4g - 2g + 7h + 9h$

$2g + 16h$

5) Distribute

SHARE- Multiply EVERY term in the parentheses

a) $5(x + 3)$

$$15x + 15$$

b) $9(7 - 3j)$

$$63 - 27j$$

c) $4(2x + 3y - 6)$

$$8x + 12y - 24$$

6) Factor

Factor out the GCF from each term. Distribute to check.

a) $5x + 10 \quad \div 5$

$$5(x + 2)$$

b) $12m - 24 \quad \div 12$

$$12(m - 2)$$

c) $2 - 6a \quad \div 2$

$$2(1 - 3a)$$

d) $4m + 12n - 8 \quad \div 4$

$$4(m + 3n - 2)$$

f) $42g - 56 \quad \div 7$

$$7(6g - 8)$$

7) Distribute and Combine Like Terms.

a) $3(4d - 7) + 7d$

$$12d - 21 + 7d$$

$$19d - 21$$

b) $5(3x + 6y - 4) - 8y$

$$15x + 30y - 20 - 8y$$

$$15x + 22y - 20$$

c) $2(6m + 5) - 4m + 2$

$$12m + 10 - 4m + 2$$

$$8m + 12$$