Name KEY Test Date: **Wednesday, 6/6**

Review Guide for Accelerated Grade 6 Assessment #13

A calculator may <u>not</u> be used on this assessment

7.EE.1 Add, subtract, factor, and expand linear expressions

1. Choose the correct rewritten form of the expression: $\frac{2}{5}(x-4.2)$.

A. $4.2\left(\frac{2}{5}\right)+4.2(x)$ B. $\frac{2}{5}(4.2)-\frac{2}{5}(x)$ C. $\frac{2}{5}(4.2)\cdot x(4.2)$

2. Write an equivalent simplified expression for $5(3x + 10) - 18$. Explain your answer.

$15x+50-18$

$15x+32$

3. Which expression below is equivalent to $\frac{3}{2}x+5\frac{1}{2}$?

A. $\frac{3}{2}(x+11)$ B. $\frac{1}{2}(3x+5)$ C. $\frac{1}{2}(3x+11)$ D. $\frac{3}{2}(2x+11)$

$\frac{3}{2}x+16\frac{1}{2}$ $\frac{3}{2}x+2\frac{1}{2}$ $\frac{3}{2}x+5\frac{1}{2}$ $3x+16\frac{1}{2}$

4. Jessie says the two expressions $6(3x - 8) - 5x$ and $13x - 8$ are equivalent. Is she correct? Explain why or why not.

$18x-48-5x$

$13x-48$

No - She forgot to distribute the 6 to the 8.

5. An equilateral triangle has a perimeter of $12x + 27$. What is the length of each side of the triangle? **Explain how you determined your answer.**

$4x+9$

$12x+27=3(4x+9)$

sides, length

6. Charlie and Roxie are simplifying the expression $-7(2x + 3y - x)$. Charlie thinks the simplified expression is $-14x + 21y + 7x$ and Roxie thinks the simplified expression is $-7x - 21y$. Who is correct? **Justify your answer.**

Charlie: $-14x+21y+7x=$

$-7x+21y$

No - forgot to keep the "-" when distributing to 3y

Roxie: correct

7. Use the GCF to write the factored form of the expression $18x + 24y$.

$18x+24y=6(3x+4y)$

2 | 18 24

3 | 9 12

3 4

GCF = 6

8. Carol takes her family out to lunch, where they order combo meals that include a sandwich, a drink, and two cookies. Her family decides to do the same. There are 4 people in the family, including Carol. Let s = the number of subs, let d = the number of drinks, and let c = the number of cookies.

Part A - Write an expression to model Carol's family lunch order.

$4(s+d+2c)$

Part B - Rewrite your expression from Part A in a different form.

$4s+4d+8c$

↳ can be switched

7.EE.2 Rewrite Expressions

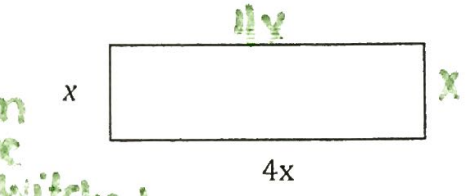
9. A rectangle is twice as long as wide. Write **two** different equivalent expressions that would determine the perimeter of this rectangle.

Expression 1 $2x+8x$

Expresssion 2 $x+x+4x+4x$

OR: $10x$

↳ can be switched



10. Cara and Joe both get paid an equal hourly wage of $7.50 per hour. This week Cara made an additional $30 in overtime.

a. Write an expression that represents the weekly wages of Cara and Joe. Let c = the number of hours that Cara worked this week and let j = the number of hours Joe worked this week.

$7.50j + 7.50c + 30$

b. Rewrite your expression from part a in a different form.

$7.50(j+c)+30$

↳ can be Switched

11. Match each expression on the left to its equivalent expression on the right.

A. $\frac{1}{2}x+\frac{1}{5}x-\frac{2}{3}$ $\frac{5}{10}x+\frac{2}{10}x-\frac{2}{3}$

B. $\frac{1}{2}x-\frac{1}{5}+\frac{2}{3}x$ $\frac{3}{6}x-\frac{1}{5}+\frac{4}{6}x$

C. $\frac{1}{2}+\frac{1}{5}x+\frac{2}{3}x$ $\frac{1}{2}+\frac{3}{15}x+\frac{10}{15}x$

1. $1\frac{1}{6}x-\frac{1}{5}$

2. $\frac{7}{10}x-\frac{2}{3}$

3. $\frac{13}{15}x+\frac{1}{2}$

12. Lucy pays $122 for lunch, which includes a tip of 18%. Which numerical expression below represents work you might use to calculate the price of the bill ***before*** tip?

A. $122 + .18$ (B.) $122 \div 1.18$ C. $.18\,(122)$ D. $122 - 0.18$