

Weekly Math Mania

Topic: Algebraic Expressions & Equations Intro

Date Due: Wednesday January 13, 2016

YOU MUST: Rate yourself on a scale of 1 to 5 on your understanding of each standard below.

1 represents “I am clueless.”

5 represents “I completely understand this concept.”

Learning Targets

	I can translate from verbal real world situations to symbolic representations
	I can use the distributive property with algebraic expressions
	I can add linear expressions
	I can subtract linear expressions

Family Engagement Work through the riddle, “Why did the Cow keep Jumping over the Barrel?” with a Family member. AND: Explain what this means to a family member: translate from verbal real world situations to symbolic representations.	Words at Work Distributive Property Equivalent Expressions Linear Expression
Independent Practice Page 391 (1-11 all) Pg 399 (1-9 all) Pg 407 (1-9 all) You may tear the page out and staple it to this packet.	Math in the Real World Real World Link on page 395. No need to tear the page out, I have provided a copy of the page in this packet.
Choose either the online activity or the textbook activity.	
Online Activity Must do the Textbook activity →	Textbook Activity Please complete the last page in this packet.

Why Did the Cow Keep Jumping Over the Barrel?

Translate each phrase below into an algebraic expression and find your answer in the corresponding answer column. Write the letter of that exercise in the box that contains the number of the answer.

- | | |
|---|---|
| <p>(E) 3 times a number</p> <p>(O) 3 more than a number</p> <p>(S) 3 decreased by a number</p> <p>(R) 3 less than a number</p> <p>(A) one third of a number</p> <p>(I) 8 more than 3 times a number</p> <p>(N) 8 less than 3 times a number</p> | <p>(18) $x + 3$</p> <p>(15) $3x - 8$</p> <p>(19) $x - 3$</p> <p>(12) $3x + 8$</p> <p>(3) $3x$</p> <p>(25) $3 - x$</p> <p>(5) $\frac{x}{3}$</p> |
| <p>(S) 5 times a number, increased by 8</p> <p>(A) 5 times the sum of a number and 8</p> <p>(H) 5 more than 8 times a number</p> <p>(O) 8 times the sum of a number and 5</p> <p>(C) twice the sum of 5 times a number and 8</p> <p>(T) 2 more than five eighths of a number</p> <p>(W) 8 times the sum of twice a number and 5</p> | <p>(22) $8(x + 5)$</p> <p>(4) $8(2x + 5)$</p> <p>(2) $8x + 5$</p> <p>(13) $2(5x + 8)$</p> <p>(6) $5x + 8$</p> <p>(20) $5(x + 8)$</p> <p>(11) $\frac{5}{8}x + 2$</p> |
| <p>(A) 7 less than 4 times a number</p> <p>(S) 7 decreased by 4 times a number</p> <p>(G) 9 less than twice a number</p> <p>(N) 9 decreased by twice a number</p> <p>(O) 9 less than half a number</p> <p>(I) 7 times a number, increased by 4</p> <p>(R) 7 times a number, increased by 4 times the number</p> | <p>(T) 9 meters higher than altitude x</p> <p>(F) 15 meters per second slower than speed x</p> <p>(P) 15°C hotter than temperature x</p> <p>(O) 9 meters shorter than twice length x</p> <p>(C) 9 years older than twice age x</p> <p>(H) \$9 cheaper than 4 times price x</p> <p>(M) 9 centimeters less than three fourths of length x</p> |
| <p>(1) $7 - 4x$</p> <p>(16) $2x - 9$</p> <p>(14) $7x + 4$</p> <p>(9) $4x - 7$</p> <p>(8) $7x + 4x$</p> <p>(24) $9 - 2x$</p> <p>(27) $\frac{x}{2} - 9$</p> | <p>(7) $x + 15$</p> <p>(28) $x + 9$</p> <p>(26) $4x - 9$</p> <p>(23) $2x - 9$</p> <p>(10) $2x + 9$</p> <p>(17) $x - 15$</p> <p>(21) $\frac{3}{4}x - 9$</p> |

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
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Examples		Non-examples

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Examples		Non-examples

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Examples		Non-examples

Definition	Characteristi	
Examples		Non-examples

Math in the Real World



Real-World Link



Homework Luke has 20 math problems and 11 science questions for homework. Cameron has 23 math problems and 10 science questions for homework.

1. The expression below represents the types of exercises that Luke has for homework.

20 math problems + 11 science questions

Complete the expression that represents the types of exercises that Cameron has for homework.

math problems + science questions

2. Write an expression for the total number of math problems and science questions for both boys.

math problems + science questions

3. Suppose Luke has x math problems and 5 science questions for homework and Cameron has x math problems and 6 science questions. The algebra tiles below represent the total number of math problems and science questions for both boys. Write an expression in simplest form that represents the algebra tiles.



Expression: _____

ONLINE OR TEXT BOOK ACTIVITY



Real-World Link



Dog Sledding The Iditarod is a dog sledding race over 1,150 miles across Alaska. The table shows two winning times.

Iditarod				
	Days	Hours	Minutes	Seconds
Race 1	9	11	46	48
Race 2	9	5	8	41

1. What is the difference in hours, minutes, and seconds between the two races?

h min s

2. Explain how you could find the difference in times between any two races, given the days, hours, minutes, and seconds.

3. Describe another situation in which finding the difference involves subtracting like units.
