

Name: \_\_\_\_\_

December 17, 2012

Mr. McAusland - 6<sup>th</sup> Grade Math

Unit 3 Practice Quiz – Sections 1 through 4

- 1) Give two special cases for the general pattern  $(2 * x) + x = 3 * m$

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- 2) Circle the general statement below that describes the special cases:

Special Cases

$$6 + (-5) = 6 - 5$$

$$9 + (-10) = 9 - 10$$

$$1.2 + (-0.6) = 1.2 - 0.6$$

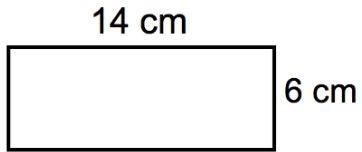
- a)  $m + n = m - n$     b)  $m * n = m / n$     c)  $m + (-n) = m - n$     d)  $m - n = m - n$

- 3) You can use the formula  $A = b * h$  to find the area of a parallelogram when the base and the height are known.

What is the Area of a parallelogram when the height is 2 ft and the base is 5 ft.

Area = \_\_\_\_\_

- 4) Use the formula  $P = 2 * (b + h)$  to find the perimeter of a rectangle



Perimeter = \_\_\_\_\_

- 5) Rename each fraction as a mixed number or whole number

a)  $\frac{30}{7}$  \_\_\_\_\_      b)  $\frac{41}{4}$  \_\_\_\_\_      c)  $\frac{50}{5}$  \_\_\_\_\_

- 6) Rename each mixed number as a fraction

a)  $5\frac{3}{4}$  \_\_\_\_\_      b)  $1\frac{2}{11}$  \_\_\_\_\_      c)  $4\frac{5}{6}$  \_\_\_\_\_

- 7) Write a general pattern for the special cases

$$\frac{1}{2} = \frac{1 * 4}{2 * 4}$$

\_\_\_\_\_

$$\frac{3}{4} = \frac{3 * 4}{4 * 4}$$

$$\frac{5}{6} = \frac{5 * 4}{6 * 4}$$

- 8) Write an algebraic expression for the situation. Use the suggested variable.

Peter had  $m$  Marshmallows for dessert. If Thomas has 9 fewer Marshmallows than Peter, how many Marshmallows does Thomas have?

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- 9) First translate each situation from words into an algebraic expression. Then solve the problem that follows.

a) The height of a triangle is twice the base. If the base of the triangle is  $b$  inches, what's the height of the triangle?

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- b) If the base of the triangle is 4 inches, what is the height of the base?

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10) Give an algebraic expression for the “What’s My Rule?”

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a	b
4	2
8	4
10	5
13	6.5