Name _____ Date _____

Equivalent Expressions and Visuals Guided Lesson Explanation

1. We start by comparing the number of sides. The example has 4 sides.

This eliminates c and d. Choice "a" has a diagonal mark that makes it into 2 equilateral triangles. Draw the same mark on the example and choice "b". We can clearly see that only the example and choice "a" make those equilateral triangles. The answer is choice "a".

2. Start by extending the expression on the left.

$(x + 2)^2 = (x + 2) * (x + 2) = x^2 + 2x + 2x + 4 \quad = x^2 + 4x + 4$

Now compare what we have on the left to the right:

$x^2 + 4x + 4 = x^2 + \_\_\_ + 2 * \_\_\_ * x$

$x^2 + 2^2 + 2 * 2 * x$ **Make them equal.**

3. A very easy way to handle of these problems is to just reduce the values. We can do this by combining the values or finding what is common value in the expression.

a) $y + 3y - 2y = 2y$ (Just process the operations.)

b) $12x + 36b = 12(x + 3b)$ (Both variables are divisible by 12.)

c) $\frac{x+4x}{5} = x$ **(Just process the operations. $5x/5 = x$)**