Patterning & Algebra

Grade 4

Summative

Name:

Grade level expectations, specific to "Expressions and Equality" (i.e., algebra):	Target Met	Still Progressing
1. Determine, through investigation, the inverse relationship between multiplication and division		
2. Determine the missing number in equations involving multiplication of one- and two-digit numbers, using a variety of tools and strategies		
3. Identify, through investigation (e.g., by using sets of objects in arrays, by drawing area models), and use the commutative property of multiplication to facilitate computation with whole numbers		
4. Identify, through investigation (e.g., by using sets of objects in arrays, by drawing area models), and use the distributive property of multiplication over addition to facilitate computation with whole numbers		

1. a. Since 4 x 5 = 20, then 20 ÷ ___ = 4   b. Since 6 x 7 = 42, then 42 ÷ ___ =7

2. a. ____ x 4 = 24   b. 9 x ____ = 45   c. 20 x ____ = 80   d. 30 x ____ = 110

3. John says that 30 x 7 = 15 x 7 x 2. Is he correct? Explain your thinking.

4. Sally says that 9 x 50 + 9 x 2 is easier than 9 x 52 . Do you agree? Justify your answer.