

Grade 5 Math: Patterns & Equations NAME: _____

1. What is the next number in each pattern? **(1 each)**

a) 4, 5, 6, 7, 8, 9, ____

b) 58, 60, 62, 64, 66, 68, ____

c) 5, 7, 10, 14, 19, 25, ____

d) 18, 19, 24, 25, 30, 31, 36, ____

e) 30, 27, 24, 21, 18, 15, ____

2. Look at this:

$$4 + 5 \bullet k = 24$$

Is that an expression, a variable, or an equation? Describe in words how you know. **(2 points)**

3. Place each example in the proper column **(3 points)**

f	$20 - 4 \bullet y + 5$	Variable	Expression	Equation
	$2 \bullet h$			
$1 \bullet k = 5$	m			
$71 \bullet u + 468 = 894$				

Grade 5 Math: Patterns & Equations Continued . . .

4. Choose a variable *and* write an expression for each sentence **(2 each)**

a) The number of cinnamon rolls plus 5 extra.

Variable: _____ Expression: _____

b) Two less than the number of books.

Variable: _____ Expression: _____

c) Double the number of eggs.

Variable: _____ Expression: _____

d) The number of stickers split equally between 5 friends

Variable: _____ Expression: _____

5. Solve each equation **(1 each)**

a) $t + 15 = 19$

b) $50 - r = 30$

c) $4 \bullet d = 24$

d) $h \div 6 = 5$

e) $99 + g = 102$

f) $z \div 6 = 48$

6. Mme. Patt has 10 more pencils than Mr. Mattatall. Mr. Mattatall has 200 pencils. How many pencils does Mme. Patt have? **(3 points)**

Variable: _____

Equation: _____

Answer: _____

Grade 5 Math: Patterns & Equations Continued . . .

7. Use the expressions to fill in the tables. **(1 each)**

Term #	1	2	3	4	5
$2 \bullet x + 1$					

Term #	1	2	3	4	5
$4 \bullet x$					

8. For each table below, tell me what the pattern is, and find an expression that would make this pattern **(2 each)**

Term #	1	2	3	4	5
?	3	6	9	12	15

What is the pattern? _____

The variable is n . What would the expression be for this table?

Term #	1	2	3	4	5
?	3	4	5	6	7

What is the pattern? _____

The variable is n . What would the expression be for this table?