Name_____ Date_____

Algebra Readiness Tasks

Algebraic Expressions

1. a) Osman starts a coding club at their school.
Six students join the club at the first meeting.
At each of the next meetings, 2 more students join.
Complete this table of values to represent the pattern.

Meeting number	Number of members
1	6
2	8
3	10
4	12

b) If m represents the meeting number, which of these expressions represents the relationship in part a).
Explain your choice.

$4m - 2$ $2m + 6$ $2m + 4$ $4m + 2$

$2m + 4$
Sample explanation: The constant change from row to row in the table is 2, so I know the coefficient of the variable will be 2. The other expression that includes $2m$ doesn't provide answers that match those in my table.

Name_____ Date_____

Algebra Readiness Tasks

Algebraic Expressions (cont'd)

2. a) Which of these expressions has the greatest value when $n = 7$?
What is the value?
(Knowledge and Understanding)

$3n - 2$	$18 - n$	$n + 10$
$4n - 15$	$2n + 8$	$2n$

$2n + 8$; 22

b) Which of these expressions has the least value when $n = 7$?
What is the value?

$18 - n$; 11

Name_____ Date_____

Algebra Readiness Tasks

Algebraic Expressions (cont'd)

Readiness Question	Grade 7 Concept	Grade 8 Concept	Grade 9 Concept	Mathology 7	Mathology 8 (Ontario)
1. a) Osman starts a coding club at their school. Six students join the club at the first meeting. At each of the next meetings, 2 more students join. Complete this table of values to represent the pattern. **Meeting number** | **Number of members** 1 | 2 | 3 | 4 | b) If m represents the meeting number, which of these expressions represents the relationship in part a). Explain your choice. 4m – 2 2m + 6 2m + 4 4m + 2	Representing a linear pattern as an algebraic expression.	Connecting the description of a linear pattern with an algebraic expression.	Writing polynomials to represent situations.	Grade 7 Patterning and Algebra Lesson 2: Linear Patterns and Equations Writing an Expression to Describe a Linear Pattern	Grade 8 Algebra Lesson 2: Patterns and Relations Writing Algebraic Pattern Rules
2. a) Which of these expressions has the greatest value when n = 7? What is the value? $3n - 2$ $18 - n$ $n + 10$ $4n - 15$ $2n + 8$ $2n$ b) Which of these expressions has the least value when n = 7? What is the value?	Writing and analyzing expressions and equations.	Evaluating algebraic expressions that involve rational numbers.	Evaluating polynomials.	Grade 7 Patterning and Algebra Lesson 3: Linear Patterns and Equations Evaluating Expressions and Writing Equations	Grade 8 Algebra Lesson 7: Variables and Equations Evaluating Algebraic Expressions