



TOOL // Grade 6 Math Expressions Assessment As/Of Learning

What is it used for?

The tool provides students with an opportunity to practice for a summative assessment and receive peer and teacher feedback prior to writing an assessment. The goal is to allow students to identify what they know, what they need help with and to obtain support in deepening their understanding before a summative assessment.

How do you use it?

Each student is given the assessment review. They complete it in half of the class. They then meet with a partner and share their responses and answers. They discuss and improve where needed. They may ask the teacher for feedback if both are having trouble with a particular skill and have checked their text or notebook. Students highlight what they need to review prior to the summative assessment. They write the summative assessment in the next couple of days and the teacher evaluates using the rubric. When the assessment is returned, the students are asked to reflect on how well they did in response to the pre-assessment feedback.

How do you adapt it to other subjects and topics?

This tool could be adjusted to be used for any math assessment.

Grade 6 Assessment Review Expressions

Evaluate the expression

$420 + m$

$m = 50$

$6X + X$ where $X = 8$

$\frac{x - 6}{7} + X$ where x is 42

$16 + y - x$ where y is 22 $x = 12$

Maja gets paid \$5.00 an hour for every hour she works. The algebraic expression they use to calculate her pay is $P = 5xH$.

What letters are variables? _____

What is the constant in this expression? _____

What is the operation? _____ -

Write an algebraic expression for each;

15 increased by a number _____

The quotient of 12 and number _____

28 decreased by a number _____

The quotient of a number and 6 _____

Write the algebraic expression in words:

$8n$

$15x - 15$

$6s + 13$

Matt spends 30 minutes a night on homework plus an extra 20 min for test review. Write an algebraic expression to show how much time he spends on homework. Use your algebraic expression to show how much time he spends on homework in one month if he does homework 4 nights a week.

The total number of books Mitzi reads over the summer can be found using the expression $2x + 3$ where n represents the number of weeks. After how many weeks will she have read 11 books?

Math Assessment Patterning and Algebra 6

Knowledge and Understanding

1. Evaluate the expression

$$m + 210 \quad m = 50$$

$$\frac{x - 7 + x}{6} \quad \text{where } x \text{ is } 42$$

$$4X + X \quad \text{where } X = 9$$

$$16 + y - 3 \quad \text{where } y \text{ is } 22$$

Communication

2. Write an algebraic expression for each;

8 more than a number _____

The quotient of 2 and number _____

A number decreased by ten _____

3. Write the algebraic expression in words:

$$2n$$

$$5x - 4$$

Francine gets paid \$7.00 for each hour she works. The formula to calculate her pay is shown below.

$$P = 7 \times H$$

Which of the following statements is true?

- A P is the only variable.
- B H is the only constant.
- C P and H are variables.
- D P and H are constants.

Problem Solving

Amazon charges \$4.00 per book plus a \$15.00 to ship the books to your house. Write an algebraic expression to show the cost of order books. What would it cost you if you bought 8 books?

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding \$ facts, terms, procedural skills	demonstrates limited knowledge of facts, terms, procedural skills by applying them with several major errors(1 or 2 partially correct)	demonstrates some knowledge of facts, terms, procedural skills by applying them with several minor errors or omissions (1 or 2 correct with a minor computation error)	demonstrates considerable knowledge of facts, terms, procedural skills, by applying them with few minor errors or omissions (3 correct or 2 correct with 1 with a minor computation error)	demonstrates a thorough knowledge of facts, terms, procedural skills, by applying them with rarely any errors or omissions (4 correct or 3 with 1 with a minor computation error)
Thinking understands the problem makes a plan (chooses a strategy) carries out the plan looks back - justifying, proving, reflecting	demonstrates limited effectiveness in: understanding what the problems are asking choosing a strategy and rarely carrying it through to an accurate solution	demonstrates some effectiveness in: understanding what the problems are asking choosing an appropriate strategy and sometimes carrying it through to an accurate solution	demonstrates considerable effectiveness in: understanding what the problems are asking choosing an appropriate strategy and usually carrying it through to an accurate solution (may have minor computational error)	is highly effective in: understanding what the problems are asking choosing an effective strategy and consistently carrying it through to an accurate solution
Communication expresses mathematical ideas orally, visually and in writing using numbers symbols, pictures, graphs, diagrams and words explains, justifies, reflects	communicates mathematical thinking with limited effectiveness with little evidence of organization, clarity, uses conventions, vocabulary and terminology with limited effectiveness to convey mathematical information 1	communicates mathematical thinking with some effectiveness with some degree of organization, clarity, uses conventions, vocabulary and terminology with some effectiveness to convey basic mathematical information 2/3	communicates mathematical thinking with considerable effectiveness with an appropriate degree of organization, clarity uses conventions, vocabulary and terminology with considerable effectiveness to convey mathematical information 4/5	communicates mathematical thinking effectively with a high degree of organization, clarity uses conventions, vocabulary and terminology effectively to convey mathematical information 6/7