

EXPRESS

K - 3

To convey knowledge and understanding.



Expressing indicates that students convey their ideas or response in any way that is appropriate to the context. This can include words, symbols, actions, objects, or images, etc. For example, students can **express** a repeating pattern core of four elements by a series of actions: clap, pat, stomp, "beep-beep"; clap, pat, stomp, "beep-beep"; clap, pat, stomp, "beep-beep"...

The table below shows where **express** is included as student action within Alberta's K-3 Math curriculum.

Grade Level	Learning Outcomes	Skills & Procedures
Kindergarten		
Grade 1		Express addition and subtraction symbolically.
Grade 2		Create and express growing patterns using sounds, objects, pictures, or actions. Create and express a repeating pattern with a pattern core of up to four elements that change by more than one attribute. Express significant events using calendar dates.

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Grade Level	Learning Outcomes	Skills & Procedures
Grade 3		<p>Express natural numbers using words and numerals.</p> <p>Express various compositions of a natural number using place value.</p> <p>Express the relationship between two numbers using $<$, $>$, or $=$.</p> <p>Express multiplication and division symbolically.</p> <p>Express fractions, including one whole, symbolically, limited to denominators of 12 or less.</p> <p>Express the relationship between two fractions of the same whole, using $<$, $>$, or $=$.</p> <p>Express time of day in relation to one 24-hour cycle. Recognize length expressed in metric or imperial units.</p>



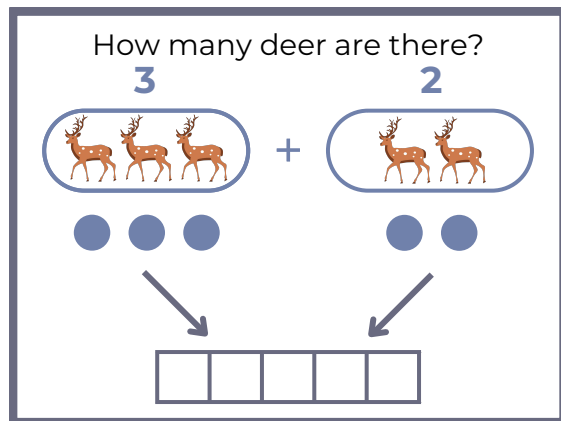
To best support learners, student action verbs should be explicitly taught, modeled and practiced through multiple experiences. The illustrative examples can provide clarification about how student understanding might be developed. It is important to reference the curriculum to view the entire context of the Learning Outcome and related KUSPS.

Illustrative Examples

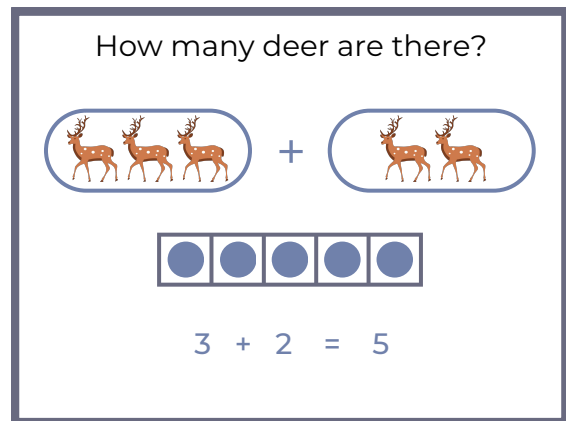
Skills and Procedures (1.N2.2): **Express** addition and subtraction symbolically.

Student A models an addition equation using manipulatives and/or pictures, which is shared with Student B. Then, Student B orally **expresses** the addition sentence and writes it on chart paper. Student B repeats the process with Student A.

Take turns modeling and **expressing** orally and in written form.



part 1



part 2

Additional Resources

[nagwa Education Resources](https://www.nagwa.com/en/education-resources/). (An educational site with many lessons and video examples. It has resources in many languages including French and Spanish. Please ensure content chosen for students is relevant to the Alberta curriculum.)

References

Nagwa. (2019, December 2). Lesson Video: The Addition Symbol. Nagwa.

<https://www.nagwa.com/en/videos/798176130541/>

Transforming Education. (n.d.). Nagwa. <https://www.nagwa.com/en/>