

1.1 Variables and Expressions

Variable: A letter that stands for a number

Operation Symbols: + , - , • , ÷

Variable Expression: A mathematical phrase that uses variables, numerals, and operation symbols.

$$2x + 4$$

$$5 \div y - 3$$

Numerical Expression: A mathematical phrase that uses only numbers & operation symbols.

$$1 + 1$$

$$2 \cdot 10 - 11$$

Variable or Numerical Expression?

Ex) $j + 9 - 7$ Variable

Ex) $8 - 9 + 19$ numerical

Ex) $h - 8 \div 2 \cdot y$ variable

Word	Symbol
Quotient	\div
Fewer than	$-$
Increased by	$+$
Difference	$-$
More than	$+$
Less than	$-$
Decreased by	$-$
Divided by	\div
Times	\times
Total	$+$
Product	\times

Translate into an expression:

Ex) The product of m and 6. $m \cdot 6$

Ex) The sum of 17 and k . $17 + k$

Ex) 8 increased by twice m . $8 + 2m$

Ex) The value of cents in 9 dimes. $9 \cdot 10$

Ex) The number of eggs in 3 dozen. $3 \cdot 12$

Ex) The number of points after 6 three-pointers. $6 \cdot 3$