

Math Section > Math Vocabulary and Expressions

Exercise # 1

A. Match each word/expression with its corresponding representation.

WORD/ EXPRESSION	REPRESENTATION
(1) integers	$\sqrt{144}$
(2) square root	15 ; 27 ; 41; 195
(3) ratio / fraction	$24 \div 8 = 3$
(4) prime factors	-6 ; 0 ; 7
(5) odd (numbers)	1 ; 2 ; 3 ; 4 ; 6 ; 8 ; 12 ; 24
(6) quotient of 24 and 8	5x or 5(x)
(7) factors of (24)	x:y or $\frac{x}{y}$
(8) some number times five	$\frac{5 + 1 + 9}{3} = \textcircled{5}$
(9) 24 to the power of 3	2 ; 4 ; 18 ; 122 ; 348
(10) average	$24^{\wedge}3$ or 24^3
(11) even (numbers)	2 ; 3 ; 17 ; 39 ; 67 ; 83 ; etc.



Exercises taken from The Princeton Review (2021) SSAT & ISEE Prep 2022. Penguin Random House, New York, US.
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LIVEWORKSHEETS

Symbols

$=$ is equal to	$\neq$ is not equal to	
$<$ is less than	$\leq$ is less than or equal to	$>$ is greater than
	$\geq$ is greater than or equal to	
$\cong$ is approximately equal to	$\approx$ is approximately	$ \quad $ absolute value
$\pm$ plus or minus	$\%$ percent	$a : b$ ratio of a to b or $\frac{a}{b}$

Exercise # 2

A. Write 'T' or 'F' in the blank to indicate if each statement below is true or false.

- _____ $9 > 7$
- _____ $6.99 \cong 7$
- _____ $47 \geq 47$
- _____ $89 < 64$
- _____ 99% is 99 percent
- _____ $14 \neq 14$
- _____ $2 : 4 = \frac{2}{4}$
- _____ $|-7| = 7$
- _____ $8 = -8$
- _____ $49 \leq 34$
- _____ $\pm 3 = -3 \text{ or } 3$
- _____ $8 + |-9| = 17$

Order of Operations - P.E.M.D.A.S.

1. Perform operations shown within **P**arentheses.
2. Attend to **E**xponents and square roots.
3. Perform **M**ultiplication or **D**ivision, whichever comes first left to right.
4. Perform **A**ddition or **S**ubtraction, whichever comes first left to right.

Exercise # 3

A. Calculate the answers to the following.

- $(17+3) + 20 =$ _____
- $45 - 43 \times 2 + 32 =$ _____
- $(12 + 3) (2 \times 3) =$ _____
- $14 \div 2 + 14 =$ _____
- $6^2 - 3 + 2 =$ _____
- $12 \times 12 + 2^3 =$ _____
- $3^2 + 4(5-2) =$ _____
- $(4+2)^3 + (3 \times 2) - 2^2 =$ _____
- $9 + 6 \div 2 \times 3 =$ _____



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Understanding Expressions

When You See	Think
sum, plus, more than, added to, combined total, larger	+
minus, less than, difference between, decreased by	—
is, was, equals, is equivalent to, is the same as, adds up to, gives	=
times, product, multiplied by, of, twice, double, triple	×
divided by, over, quotient, per, out of, into	÷
what, how much, how many, a number	x , n , etc.

Exercise # 4

A. Translate the following phrases from English to Math.

1. y is 5 more than x = _____
2. r equals half of s = _____
3. Divide the sum of w and x by y and multiply the result by z = _____
4. The product of a and b is 3 more than their sum = _____
5. 2 less than m is equal to n = _____
6. x is twice as great as y = _____
7. The quotient of z and 4 is 60 = _____
8. how many times does seven go into 35? = _____
9. sixteen subtracted from a number = _____
10. four larger than twice x = _____



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More Verbal Expressions

Verbal Expression	Algebraic Expression
Some number plus 7	$x+7$
Some number subtracted from 8	$8-x$
8 subtracted from some number	$x-8$
The product of some number and 12	$12x$
The product of 5 and the sum of x and y	$5(x + y)$
Some number divided by 4 or some number in 4	$\frac{x}{4}$
The ratio of 6 and some number	$\frac{6}{x}$
9 times some number plus the sum of 5 and y	$9x + (5 + y)$
12 less the sum of 3 and some number	$12 - (3 + x)$

Exercise # 5

A. Write the following using algebraic expressions.

1. Six times some number plus four squared = _____
2. Twelve times the sum of six plus some number = _____
3. Twice x and y times the product of 11 plus the product of x and y = _____
4. Some number divided by 40 and the product of x and y = _____
5. Some number squared plus that number times 14 equals minus 21 = _____
6. Seven less than y plus the cube root of 216 square = _____
7. Twelve in p multiplied by the quotient of y and 3 = _____
8. The product of 8 and y minus x plus 4 to the power of 4 = _____



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