Math Section > Math Vocabulary and Expressions

Exercise # 1

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

WORD/ EXPRESSION	REPRESENTATION
(1) integers	√144
(2) square root	15 ; 27 ; 41; 195
(3) ratio / fraction	24 ÷ 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	$\frac{5+1+9}{3}=5$
(9) 24 to the power of 3	2 ; 4 ; 18 ; 122 ; 348
(10) average	24^3 *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	≠ is not equal to

< is less than	≤ is less than or equal to	> is greater than
	≥ is greater than or equal to	

≅ is approximately equal to	≈ is approximately	| | absolute value

± 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 of false.

1. _____ $9 > 7$

2. _____ $6.99 \cong 7$

3. _____ $47 \geq 47$

4. _____ $89 < 64$

5. _____ 99% is 99 percent

6. _____ $14 \neq 14$

7. _____ $2 : 4 = \frac{2}{4}$

8. _____ $|-7| = 7$

9. _____ $8 = -8$

10. _____ $49 \leq 34$

11. _____ $\pm 3 = -3$ *or* 3

12. _____ $8 + |-9| = 17$

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.

1. $(17+3) + 20 =$ _____

2. $45 - 43 \times 2 + 32 =$ _____

3. $(12 + 3)(2 \times 3) =$ _____

4. $14 \div 2 + 14 =$ _____

5. $6^2 - 3 + 2 =$ _____

6. $12 \times 12 + 2^3 =$ _____

7. $3^2 + 4(5-2) =$ _____

8. $(4+2)^3 + (3\times2) - 2^2 =$ _____

9. $9 + 6 \div 2 \times 3 =$ _____

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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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