NYS Next Generation Learning Standards

Grade 5

Comprehensive Evaluation

Math topics assessed in this evaluation include:

OA:	Operations & Algebraic Thinking
NBT:	Number & Base Ten
NF:	Number & Fractions
MD:	Measurement & Data
G:	Geometry

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1. NY-5.OA.1

Evaluate the following numerical expression using the order of operations:
$12 + [(6 \times 3) - (10 \div 2)]$

2. NY-5.OA.2

Write a simple numerical expression for the following calculation without evaluating it:

"Add 8 and 7, then multiply the result by 4."

3. NY-5.OA.3

Rule 1: Add 3 (start at 0)
Rule 2: Add 6 (start at 0)

a) Generate the first 4 terms of both.
b) Identify the relationship between the two patterns.

4. NY-5.NBT.1

In the number **5,500**, how many times greater is the digit 5 in the thousands place than the 5 in the hundreds place?

5. NY-5.NBT.2

Solve: $4.25 \times 10^3 =$ _____
Explain what happens to the decimal placement when multiplying by a power of 10.

6. NY-5.NBT.3

Read and compare the following decimals using $<, >,$ or $=$:

Forty-two and six hundredths _____ 42.065

7. NY-5.NBT.4

Use place value understanding to round the following decimal to the nearest hundredth:
7.839

8. NY-5.NBT.5

Multiply the following multi-digit whole numbers using a standard algorithm:
436×27

9. NY-5.NBT.6

Find the whole-number quotient for the following:
$1,560 \div 24$

10. NY-5.NBT.7

Solve the following using models or drawings:
$3.45 + 1.2 =$ _____
$0.5 \times 0.3 =$ _____

11. NY-5.NF.1

Add the fractions with unlike denominators by creating equivalent fractions:

$\frac{2}{3} + \frac{1}{4} =$

12. NY-5.NF.2

Sarah ran $\frac{3}{4}$ mile on Monday and $\frac{5}{8}$ mile on Tuesday. How many total miles did she run?

13. NY-5.NF.3

Interpret the fraction as division ($\frac{a}{b} = a \div b$) to solve:

If 3 pizzas are shared equally among 4 friends, how much pizza does each friend get?

14. NY-5.NF.4

Find the area of a rectangle with a length of $\frac{2}{3}$ m and a width of $\frac{4}{5}$ m.

15. NY-5.NF.5

Interpret multiplication as scaling. Without multiplying, which product is larger? Explain.

$5 \times \frac{1}{2}$ OR $5 \times \frac{3}{2}$

16. NY-5.NF.6

A recipe requires $2\frac{1}{2}$ cups of flour. If you make 3 times the recipe, how many cups do you need?

17. NY-5.NF.7

Solve the following division problems:

$4 \div \frac{1}{3} =$
$\frac{1}{5} \div 2 =$

18. NY-5.MD.1

Convert the following measurement within the standard system:

4.5 kilometers = _____ meters
(1 km = 1,000 m)

19. NY-5.MD.2

Rainfall (in): $\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{1}{2}$

Make a line plot to display this fractional measurement data.

20. NY-5.MD.3

A solid figure is packed tightly with 24 unit cubes (1 cm each). What is the volume of the figure?

21. NY-5.MD.4

A rectangular prism is built using 3 layers of unit cubes. Each layer has 4 rows with 2 cubes in each row.

How many unit cubes were used to build this prism, and what is its total volume?

22. NY-5.MD.5

Find the volume of a right rectangular prism with $l = 5\text{cm}, w = 3\text{cm}, \text{and } h = 4\text{cm}$ using the formula $V = l \times w \times h$.

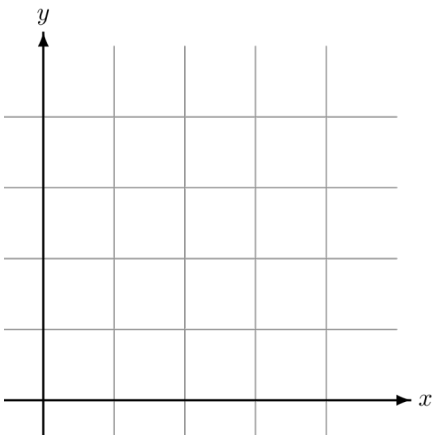
23. NY-5.G.1

Define the following parts of a coordinate system:

1. x-axis 2. y-axis 3. origin (0,0)

24. NY-5.G.2

Plot the points (3,5) and (3,2) in the first quadrant. What is the distance between them?



25. NY-5.G.3

True or False: "All squares are rectangles." Explain using properties of 2D shapes.

26. NY-5.G.4

Classify these figures in a hierarchy: Polygon, Quadrilateral, Parallelogram, Rectangle, Square.