COWICHAN VALLEY
School District

Math Screener

Grade Eight

September 2026

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Grade Eight

The Cowichan Valley Mathematics Assessment has been designed as a common formative assessment and universal screener for our district. Each grade level assessment is based on foundational skills from the prior year. The assessment is also designed to allow educators to use prior grade assessments to identify learning needs of students. The screener questions align directly with the identified foundational skills found in instructional resource documents for each grade. Access the documents here or use the QR code.

The information gained from this tool will serve as a universal screener for our district's tiered instruction model. The data will inform individual, small group, and class instruction. It will also help identify patterns of instructional needs in a class, school or across the district as we work to ensure students master these foundational skills.

Each fall, classroom teachers and school teams will work together to identify each student's strengths and needs with foundational mathematics skills. Teachers are encouraged to administer the assessment in *small sections* during the first eight weeks of the school year.

The Mathematics Assessment has been designed in partnership with teachers across our district with the following foundational principles:

1. Aligned with curriculum standards from the previous grade
2. First Peoples Principles of Learning
3. Assessment *with* and *for* our learners; not *to* our learners

In addition, teachers are invited to paraphrase directions to align with classroom language, use classroom materials (alternate concrete materials, dry erase boards, flash cards), and administer the assessment in small parts.

Each grade level screener is an inventory of skills and does not represent the full, complex set of skills necessary for proficiency in mathematics. Our district's Numeracy Framework provides more in- depth information, instructional resources, and intervention strategies.

The **Grade Eight** assessment is a written response format. Teachers are encouraged to do follow-up interviews when clarification is needed.

Scoring is yes (shows mastery) or no. Where the student is required to provide more than just a numerical answer, some elaborations may be given in the key to help teachers determine mastery.

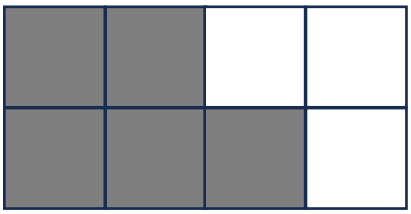
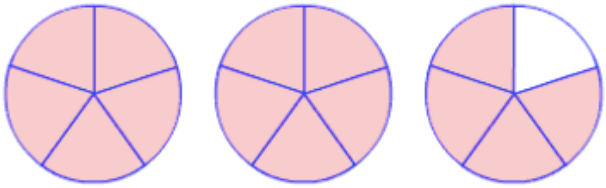
To enter scores, teachers will input data into the dashboard.

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Grade Eight Math Screener

Name: _____ Date: _____

Number Sense

#	Question
Fractions	
1	Circle the correct fraction for the shaded area of the below rectangle $a)\ \frac{5}{6}$ $b)\ \frac{3}{6}$ $c)\ \frac{5}{8}$ $d)\ \frac{3}{8}$ 
2	Which improper fraction and mixed number represents the shaded area? $a)\ \frac{4}{5}, 2\frac{4}{5}$ $b)\ \frac{14}{5}, 2\frac{1}{5}$ $c)\ \frac{4}{5}, 2\frac{1}{5}$ $d)\ \frac{14}{5}, 2\frac{4}{5}$ 
Ordering	
3	Circle **all** the values greater than 0.82. a. 810/1000 b. 0.815 c. 45/50 d. 85/100
4	Placement on a number line: $\frac{8}{10}$, 0.25, 0.9, $\frac{1}{2}$ 
Fraction-Percent-Decimal Relationships	

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5	Circle **all** of the below options that are equivalent to $\frac{3}{5}$. a. 0.6 b. 75% c. 
6	Circle **all** of the below options that are equivalent to 0.25. a. 25% b. $\frac{3}{5}$ c. 
7	Circle **all** of the below options that are equivalent to 75%. a. 0.7 b. $\frac{3}{4}$ c. 

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Computational Fluency

Multiplication	
8. Calculate $7 \times 6 =$	
Multidigit Multiplication	
9. Calculate $123 \times 8 =$	10. Calculate $270 \times 12 =$
Division	
11. Calculate $48 \div 6 =$	
Multidigit Division	
12. Calculate $786 \div 3 =$	13. Calculate $738 \div 18 =$

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Operations with Integers	
14. Calculate $-9 + 2 =$	15. Calculate $(-10) \times (-2) =$

Order of Operations with Integers

16. Solve the following question using BEDMAS

$3 + 5 \times (6 - 2) =$

17. Solve the following question using BEDMAS

$3 - 6 \div (2 + 1) \times 3 + 1 =$

Solving Equations

18. Solve the equation for *x*:

$3x - 2 = 10$

19. Solve the equation for *x*:

$4 + 6x = 16$

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Decimal Addition & Subtraction	
20. Calculate $5.39 + 4.87 \ =$	21. Calculate $17.22 - 4.31 \ =$
Decimal Multiplication & Division	
22. Calculate $36.4 \times 5 \ =$	23. Calculate $2.56 \div 4 \ =$
Order of Operations with Decimals	
24. Solve the following question using BEDMAS $2 \times 1.3 + 5 \div (5.1 - 2.6) =$	

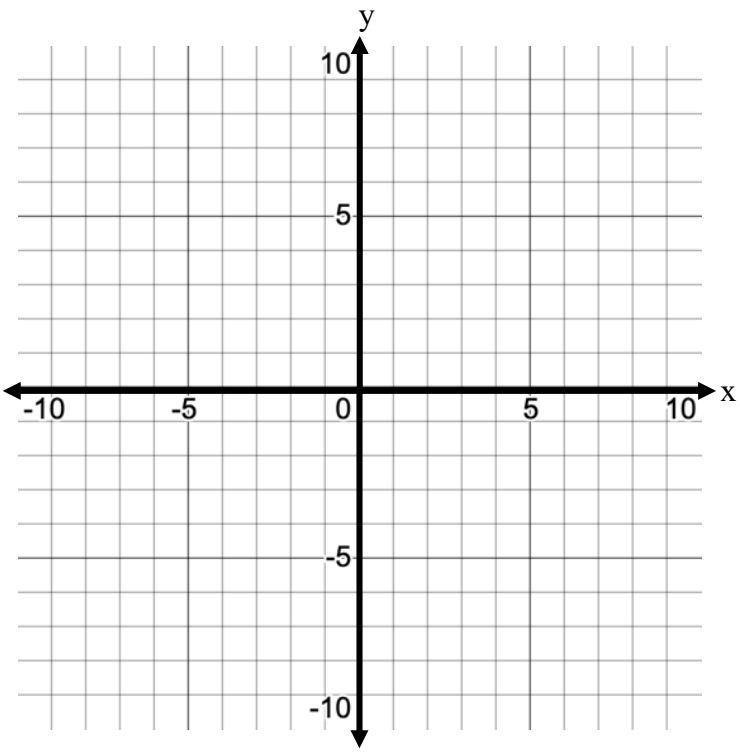
Linear Relations

25. Fill in the empty spots on the table of values:

x	y
3	
2	
1	4
0	1
-1	-2
-2	

26. Plot the points and make a line graph (also called a linear graph) with the following table of values

x	y
2	6
1	4
0	2
-1	0
-2	-2



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Scoring Sheet for Dashboard Entry Student Name:

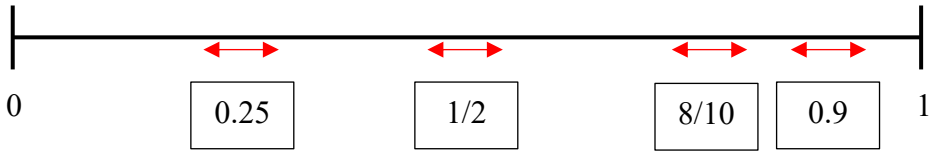
Fractions (Qs 1,2)	____/2
Ordering (Qs 3,4)	____/2
Fraction-Percent-Decimal Relationships (Qs 5,6,7)	____/3
Multiplication (Q 8)	____/1
Multidigit Multiplication (Qs 9,10)	____/2
Division (Q 11)	____/1
Multidigit Division (Qs 12,13)	____/2
Operations with Integers (Qs 14,15)	____/2
Order of Operations with Integers (Qs 16,17)	____/2
Solving Equations (Qs 18,19)	____/2
Decimal Addition & Subtraction (Qs 20,21)	____/2
Decimal Multiplication & Division (Qs 22,23)	____/2
Order of Operations with Decimals (Q 24)	____/1
Linear Relations (Qs 25,26)	____/2

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Number Sense Answer Key – Grade Eight

Question #	Answers
1	c
2 Source – MIPI	d
3	c, d
4	 Red arrow represents range of answer.
5	a
6	a, c
7	b

Computational Fluency Answer Key – Grade Eight

Question #	Answers
8	42
9	984
10	3240
11	8
12	262
13	41
14	−7

15	20
16	23
17	−2
18	$x = 4$
19	$x = 2$
20	10.26
21	12.91
22	182
23	0.64
24	4.6
25	10, 7, -5
26	