



Grade 8 Numeracy Assessment

Teacher Administration Guide

This screener was adapted from the Saskatchewan Math Screeners and modified by SD67 to align with the BC curriculum and district numeracy priorities. It is designed to provide a snapshot of students' foundational numeracy understandings at the beginning & end of Grade 8 and to help inform instructional planning and support.

The assessment focuses on key prerequisite skills in:

- Representing decimals, fractions, and percents
- Decimal operations
- Fraction concepts and operations
- Factors and multiples
- Integer operations
- Linear relations
- Solving equations

Administration Procedures

Time Required

- Approximately **30-40 minutes**
- Students should complete the assessment in a single sitting.

Calculator Use

- **Calculators are not permitted.**
- The screener is designed to assess students' understanding of foundational numeracy concepts and procedures.

Student Instructions

Before beginning, tell students: This assessment is designed to help your teacher understand what you already know. Do your best work and show your thinking when appropriate.

Remind students to:

- Attempt every question, work independently & ask for clarification if they do not understand directions.

Marking

- Mark responses using the provided answer key.
- Record section scores on the cover page.
- Enter each section score into ***Ed Plan insight***.

Results can be used to:

- Identify areas of strength and need for individual students.
- Inform instructional planning and intervention.
- Support school and district-level conversations about numeracy learning.

The screener is intended as one source of evidence and should be considered alongside classroom assessment evidence. Teacher observations & student work samples and conversations. At the beginning of the course, results should be used to identify trends and support planning.



SD67 Grade 8 Numeracy Screener

8.1 Student Booklet

Name:

Block:

Teacher:

Section	Enter Raw Score
Section 1: Representing Decimals, Percentages & Fractions	/12
Section 2: Decimals	/4
Section 3: Fractions	/7
Section 4: Factors & Multiples	/4
Section 5: Integers	/6
Section 6: Linear Relations	/4
Section 7: Solving Equations	/3

Section 1: Representing Decimals, Percentages and Fractions

/12

1. Write the value of the underlined digit in words or fraction form.

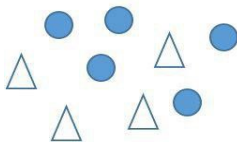
56.974

2. Write 28% as a fraction.

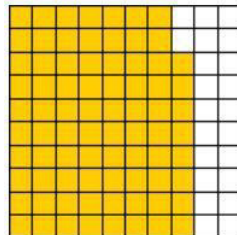
3.

Fraction	Decimal	Percent
$\frac{3}{100}$		
	0.06	
		45%

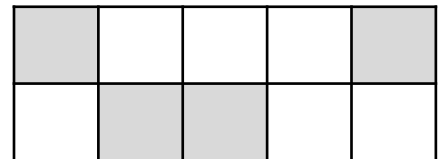
4. What is the ratio of Triangles to circles?



5. What percent of the diagram is shaded?



6. What percent of the diagram is shaded?



7. Order the following on the number line below:

$\frac{5}{2}$, -1 , $1\frac{1}{4}$, 0.9 , 0 , 1 , 0.259

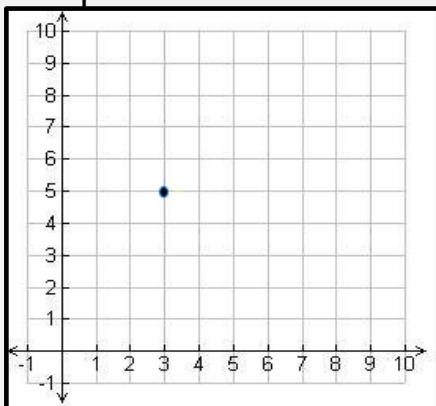


/1

Section 2: Decimals		/4
8. Without calculating an answer, place the decimal point in the correct position. $653.73 - 104.54 = 54919$		9. Without calculating an answer, place the decimal point in the correct position. $417.35 \div 98.2 = 425$
10. Multiply: $0.458 \times 6 =$	11. Divide: $6.52 \div 4 =$	
Section 3: Fractions		/7
12. Write $\frac{8}{12}$ in lowest terms.		13. Write $\frac{10}{3}$ as a mixed number.
14. Subtract: $\frac{3}{8} - \frac{1}{8}$	15. Add: $\frac{2}{9} + \frac{5}{9}$	16. Write $3\frac{2}{5}$ as an improper fraction.
17. Express as a mixed number. 		18. Express as an improper fraction. 

Section 4: Factors and Multiples			/4
19. Circle all the factors that 90 is divisible by:			2 3 4 5 6 8 9 10 /1
20. What is the greatest common factor (GCF) of 16 and 24?	21. What is the least common multiple (LCM) of 9 and 12?	22. Circle the prime number. 18 15 17	
Section 5: Integers			/6
23. Add: $(+8) + (-6) =$	24. Subtract: $(-5) - (-4) =$	25. Solve: $7 \times (-5) =$	
26. Solve $(-56) \div (-8)$	27. Solve (Use order of operations) $5 \times 3 + 12 \div 2 =$	28. Solve (Use order of operations) $20 - 6(2) \div 4 + 7 =$	

29. What are the coordinates of the point?



30. Write an expression to represent the pattern.

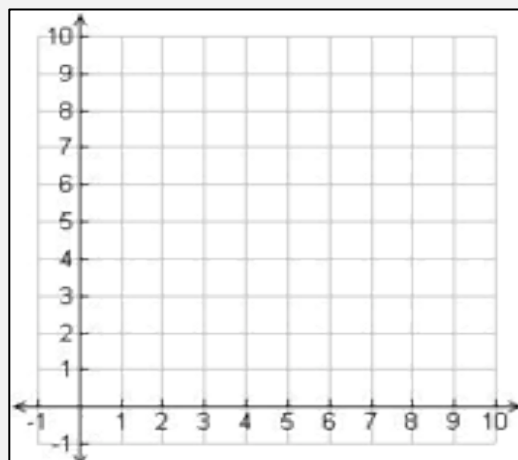
INPUT	OUTPUT
1	2
2	5
3	8
4	11

31. Fill in the table for $y = 2x + 3$

X	Y
1	
2	
3	
4	

32. Draw the graph using the table of values.

X	Y
1	6
2	7
3	8
4	9



33. Solve
 $w - 25 = 34$

34. Solve
 $16 = 3x + 4$

35. Solve
 $a + 4 = -10$

Grade 8 Screener

Name: _____ Block _____ Teacher _____

Section 1: Representing Decimals, Percentages and Fractions

/12

1. Write the value of the underlined digit in words or fraction form.

56.974

$\frac{7}{100}$

seven hundredths

/1

2. Write 28% as a fraction.

$$\frac{28}{100} = \frac{7}{25}$$

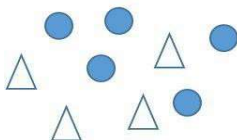
/1

- 3.

Fraction	Decimal	Percent
$\frac{3}{100}$	.03	3%
$\frac{6}{100}$	0.06	6%
$\frac{45}{100}$	0.45	45%

/6

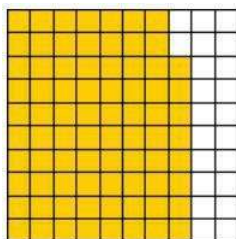
4. What is the ratio of Triangles to circles?



4:5

/1

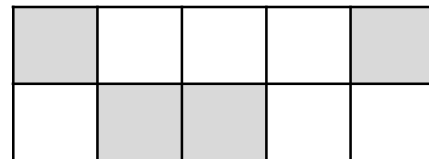
5. What percent of the diagram is shaded?



78%

/1

6. What percent of the diagram is shaded?

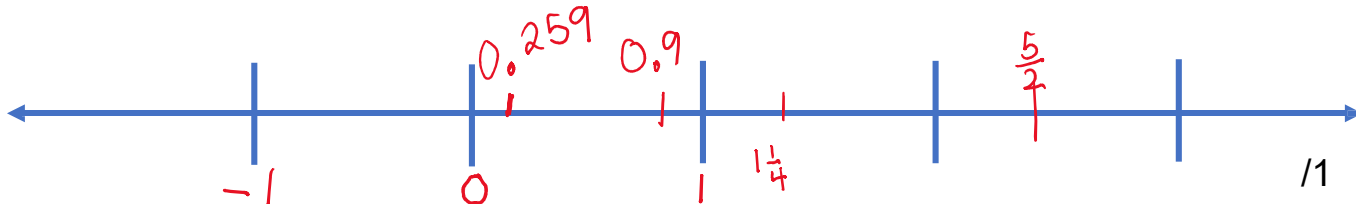


40%

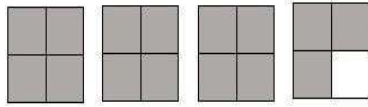
/1

7. Order the following on the number line below:

$\frac{5}{2}$, -1, $1\frac{1}{4}$, 0.9, 0, 1, 0.259

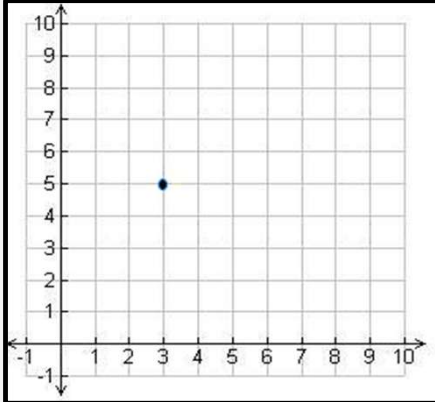


/1

Section 2: Decimals		/4
8. Without calculating an answer, place the decimal point in the correct position. $653.73 - 104.54 = 549.19$	9. Without calculating an answer, place the decimal point in the correct position. $417.35 \div 98.2 = 4.25$	/1
10. Multiply: $0.458 \times 6 = 2.748$	11. Divide: $6.52 \div 4 = 1.63$	/1
Section 3: Fractions		/7
12. Write $\frac{8}{12}$ in lowest terms. $\frac{2}{3}$	13. Write $\frac{10}{3}$ as a mixed number. $3\frac{1}{3}$	/1
14. Subtract: $\frac{3}{8} - \frac{1}{8}$ $\frac{2}{8}$ or $\frac{1}{4}$	15. Add: $\frac{2}{9} + \frac{5}{9}$ $\frac{7}{9}$	/1
17. Express as a mixed number.  $2\frac{3}{4}$	18. Express as an improper fraction.  $\frac{15}{4}$	/1

Section 4: Factors and Multiples			/4
19. Circle all the factors that 90 is divisible by: 2 3 4 5 6 8 9 10			/1
20. What is the greatest common factor (GCF) of 16 and 24? 8	21. What is the least common multiple (LCM) of 9 and 12? 36	22. Circle the prime number. 18 15 17	/1
Section 5: Integers			/6
23. Add: $(+8) + (-6) = $ 2	24. Subtract: $(-5) - (-4) = $ -1	25. Solve: $7 \times (-5) = $ -35	/1
26. Solve $(-56) \div (-8)$ 7	27. Solve (Use order of operations) $5 \times 3 + 12 \div 2 = $ 15 + 6 = 21	28. Solve (Use order of operations) $20 - 6(2) \div 4 + 7 = $ 20 - 12 \div 4 + 7 = 20 - 3 + 7 = 17 + 7 = 24	/1

29. What are the coordinates of the point?



3, 5

/1

30. Write an expression to represent the pattern.

INPUT	OUTPUT
1	2
2	5
3	8
4	11

$3x - 1$

/1

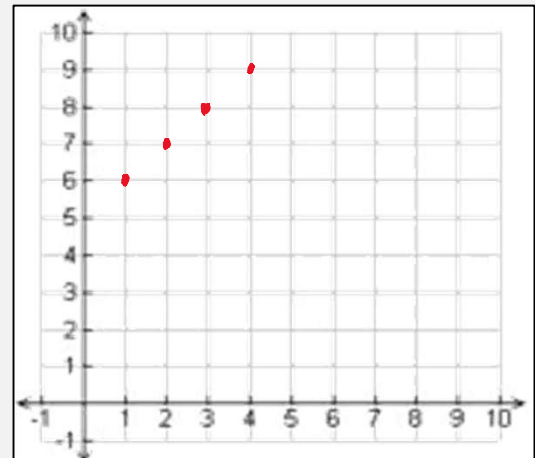
31. Fill in the table for $y = 2x + 3$

X	Y
1	5
2	7
3	9
4	11

/1

32. Draw the graph using the table of values.

X	Y
1	6
2	7
3	8
4	9



/1

Section 7: Solving Equations

/3

33. Solve

$$w - 25 = 34$$

$$+25 \quad +25$$

$$w = 59$$

/1

34. Solve

$$16 = 3x + 4$$

$$-4 \quad -4$$

$$\frac{12}{3} = \frac{3x}{3}$$

$$4 = x$$

/1

35. Solve

$$a + 4 = -10$$

$$-4 \quad -4$$

$$a = -14$$

/1