

Unit 1: Number Skills Pretest

Math 9 Principles

Name: _____

Block: _____

Please initial this box to indicate you carefully read over your test and checked your work for simple mistakes.

	What I can do in this unit	Level
1-1	I can identify numbers on a number line, compare positive and negative numbers, and evaluate absolute values.	
1-2	I can combine successive signs and add or subtract two or more integers. (positive or negative)	
1-3	I can evaluate expressions with integers using correct order of operations.	
1-4	I can add or subtract two or more fractions (in mixed number form or improper).	
1-5	I can multiply or divide two or more fractions, remembering to simplify before evaluating. I always reduce!	

Code	Value	Description
N	Not Yet Meeting Expectations	I just don't get it.
MM	Minimally Meeting Expectations	Barely got it, I need some prompting to help solve the question.
M	Meeting Expectations	Got it, I understand the concept without help or prompting.
E	Exceeding Expectations	Wow, nailed it! I can use this concept to solve problems I may have not seen in practice. I also get little details that may not be directly related to this target correct.

1-1: I can identify numbers on a number line, compare positive and negative numbers, and evaluate absolute values.

1. Evaluate: $|6 - 27|$

2. Place a $<$, $>$, or a $=$ sign between the following to make it true:

$$4 \text{ ____ } |1 - 7|$$

3. Evaluate: $|-3| - |-10|$

4. $|-2 + 6| - |-7|$

5. Graph the following numbers on a number line $-4, 3, 0, -1,$

6. Evaluate the expression $|x + y|$ when $x = 3$ and $y = -1$.

7. Evaluate the expression $|a| - |b - c|$ when $a = -6, b = 10,$ and $c = -8$.

1-2: I can combine successive signs and add or subtract two or more integers. (positive or negative)

8. Evaluate: $4 - (-1) =$

9. Evaluate: $-4 - 12 =$

10. Evaluate: $2 - (1 - 9) =$

11. Evaluate: $(4 - 7) - (-3 + 8) =$

12. Evaluate: $8 + (-1 - 8 + 3) =$

13. Find the value that should go in the blank in order for the statement to be true.

$$3 - \underline{\quad} = -7$$

14. Find the value that should go in the blank in order for the statement to be true.

$$\underline{\quad} - (-8) = 6$$

1-3: I can evaluate expressions with integers using correct order of operations.

15. Evaluate: $20 - 3(7) =$

16. Evaluate: $(-6 - 4)(-5 + 3) =$

17. Evaluate: $8 - 2(0 - -8) =$

18. Evaluate: $2(9 - 12) - 3(-5 + 1) =$

19. Evaluate: $-(3 + -7) - 4(-10 - -8) =$

20. Evaluate: $-8 + -3(-5 - -2) =$

21. Evaluate: $\frac{-4-2}{-2+4}$

22. Evaluate: $\frac{3(-5)-4(8-11)}{(5-6)(-7--1)}$

1-4: I can add or subtract two or more fractions (in mixed number form or improper).

23. Complete the equivalent fraction statement: $\frac{2}{9} = \frac{\quad}{54}$

24. Reduce to lowest terms: $\frac{56}{16} =$

Rewrite each question with common denominators then add or subtract as required.

25. $\frac{2}{3} + \frac{3}{4}$

26. $\frac{5}{8} - \frac{2}{3}$

27. $2\frac{1}{2} - 4\frac{1}{3}$

28. $\frac{5}{6} + \frac{3}{4}$

29. $\frac{5}{6} - 1\frac{1}{15}$

1-5: I can multiply or divide two or more fractions, remembering to simplify before evaluating. I always reduce!

30. Write the reciprocal of $-2\frac{1}{3}$.

31. Evaluate: $\frac{5}{9} \cdot \frac{3}{20}$

32. Evaluate: $2 \div \frac{3}{2}$

33. Evaluate: $3\frac{1}{5} \div 1\frac{1}{3}$

34. Evaluate: $-2\frac{1}{4} \div \frac{15}{32} \div \frac{36}{25}$

35. Evaluate: $\left(\frac{7}{8} - \frac{3}{4}\right) \cdot \left(\frac{2}{3} \div \frac{1}{3}\right)$

36. A rectangular hallway has dimensions 6 feet by 18 feet. It is to be tiled with square tiles, each with the dimensions $\frac{2}{3}$ feet by $\frac{2}{3}$ feet. How many tiles will you need?

37. A recipe calls for three quarters of a bowl of flour and one sixth of a bowl of sugar, then to fill the remainder of the bowl with milk. What fraction of the bowl is filled with milk?