

Unit One: Back to the Basics

Name: \_\_\_\_\_

Pre-Algebra: Practice Test

Hour: \_\_\_\_\_

**1.1 I can identify the commutative, associative, and identity properties.**

Name the property being illustrated below.

1.  $w \cdot 1 = w$

2.  $(a + b) + 7 = 7 + (a + b)$

3.  $8(xy) = (8x)y$

4.  $c + 0 = c$

5.  $(a + 3) + b = a + (3 + b)$

6.  $5n * 6 = 5(6)n$

Score: \_\_\_\_\_ %

<b>1.2: I can write expressions using number, operations and variables.</b>	
1. The sum of a number and 9.	2. The product of a number and 5 is the same as 20.
3. 20 less than some number.	4. The quotient of 30 and the difference some number and 7 is less than 40.
5. A number is at most 22	6. 6 times the quantity of some number and 3.
7. The difference of a number and 10.	8. 16 is greater than or equal to the sum of a number and 34.
9. 8 more than the quotient of 20 and some number.	10. The product of 3 and the quantity of some number minus 15.
	Score: _____ %

**1.3: I can round a number to the correct place value and I can add and subtract multi-digit numbers with decimals**

1. Round to the nearest hundredth: 8.437

2. Round to the nearest tens: 63.992

3. Round to the nearest tenth: 5.9876

4. Round to the nearest thousandth: 0.6774

5. Add:  $43.57 + 104.6$

6. Add:  $1392.16 + 16.16$

7. Add:  $22.63 + 1.694$

8. Subtract:  $17.6 - 9.3$

9. Subtract:  $23.96 - 19.931$

10. Subtract:  $44.44 - 16.1$

Score: \_\_\_\_\_%

**1.4: I can compare and order decimals and I can multiply multi-digit decimals.**

Compare the numbers given using  $<$ ,  $>$ , or  $=$ .

1.

$$5.6 \text{ \_\_\_\_\_ } 5.65$$

2.

$$4.234 \text{ \_\_\_\_\_ } 4.2340$$

3. Multiply:  $9.6 \times 5$

4. Multiply:  $5.29 \times 11.3$

5. Multiply:  $8.3 \times 7.4$

6. Multiply:  $18.7 \times 19$

Score: \_\_\_\_\_ %

**1.5: I can divide multi-digit decimals**

Show your work.

1. Divide:  $2.45 \div 3.5$

2. Divide:  $1.45 \div 0.08$

3. Divide:  $6.7 \div 13.4$

4. Divide:  $11.5 \div 0.2$

Score: \_\_\_\_\_%

**1.6: I can write repeated multiplication using an exponent, I can simplify expressions using the Product and Quotient Power Properties**

Write repeated multiplication of same factor using an exponent.

1.  $m * m * m * m * m * m * m * m * m * m * m =$

2.  $5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 =$

Write the exponent as repeated multiplication.

3.  $n^3$

4.  $3^5$

Simplify.

5.  $g^6 \cdot g^5 \cdot g$

6.  $3k \cdot 2k^4 \cdot k \cdot k^9$

7.  $\frac{f^8}{f^5}$

8.  $\frac{16n^5}{8n^5}$

Score: \_\_\_\_\_%

**1.7: I can use Order of Operations to calculate numerical expressions**

1.  $3[5 + (3^3 - 7)]$

2.  $\frac{13+11}{14-6-2^2}$

3.  $26 - (4^2 - 8) \div 2$

4.  $16 \div 4 - 24 \div 12$

5.  $\frac{13+7^2 \div 7}{9-20 \div 4+16}$

6.  $\frac{36}{2} + \frac{3 \cdot 21}{11-2}$

7.  $(13 - 9 + 2 - 1)^2 \div (3^2 - 4)$

8.  $30 + 2 - 24 \div 4 + 9 - 3(4)$

Score: \_\_\_\_\_ %