Name _____ **September 26, 2019**

Alg1 Q1 Test 1 **Test: Monday, 10/7/19** **Due: 10/3/19**

1) Give an example of a number that is natural, but not an integer. ____

2) Give an example of a number that is an integer, but not a whole number. _____

3) Give an example of a number that is a whole number, but not a natural number. _____

4) Give an example of a number that is a rational number, but not a natural number. _____

5) Give an example of a number that is rational, but not an integer. _____

Write all the sets each number belongs to:

6) $-\frac{3}{4}$ _____ 7) -8 _____

8) π _____ 9) $\sqrt{121}$ _____

10) 0 _____ 11) $\sqrt{5}$ _____

There will be no matching column on the test, but you must be able to identify each property and write a statement illustrating each property:

Complete the Matching Column (put the corresponding letter next to the number)

12) If 11 + 4 =15, and 3 · 5 = 15,then11+4 = 3·5	a) Reflexive
13) 2(14 – 3) = 2(14) – 2(3)	b) Additive Identity
14) If 4 + 3 = 7, then 7 = 4+ 3	c) Multiplicative identity
15) 5 · 0 = 0	d) Associative Property of Mult.
16) 7 · (9 · 6) = (7 · 9) · 6	e) Transitive
17) 12 · 1 = 12	f) Associative Property of Addition
18) 3 + (5 + 12) = (3 + 5) + 12	g) Symmetric
19) 22 + 0 = 22	h) Commutative Property of Add.
20) 15 + 4 = 15 + 4	I) Multiplicative property of Zero
21) 15+4 = 4+15	j) Distributive

Name _____ **September 26, 2019**

Alg1 Q1 Test 1 **Test: Monday, 10/7/19** **Due: 10/3/19**

Simplify:

22) (12x - 7) - (7x + 7)

23) (13x – 15) + (-7x - 4)

24) $6(4x^2 - 12x – 10) + 12(-2x^2 + 6x + 5)$

25) $4(6x^2 + 12x – 10) - 7(4x^2 – 8x - 7)$

26) $6(6x^2 – 9x + 10) - 4(9x^2 - 14x -15)$

27) $3(-12x^3 - 9x^2 + 6x - 15) - 9(4x^3 - 3x^2 - 2x - 5)$

Name _____ **September 26, 2019**

Alg1 Q1 Test 1 **Test: Monday, 10/7/19** **Due: 10/3/19**

Multiplication and Division of Monomials:

29) $(4x^4y^{-3}z^6)^3$

30) $(2x^8y^{10}z^{-5})(5x^{-5}y^3z^2)^3$

31) $\frac{48x^7y^6z^8}{32x^5y^{-6}z^8}$

35) $(-4x^2yz^{-9})^2(2x^{-4}y^4z^6)^3$

36) $\frac{(15x^6y^{12}z^{-10})^2}{(-5x^7y^{-6}z^9)^4}$

37) $\frac{(4x^{15}y^{-5}z^{10})^3}{(2x^9y^{-3}z^6)^5}$

38) $4x(12x^2 - 15x - 9) - 12x(4x^2 - 5x + 3)$

39) $5y^2(5y^3 - 4y^2 + 8y - 7) - 6y(3y^3 + 6y^2 - 5y - 9)$

Name _____ **September 26, 2019**

Alg1 Q1 Test 1 **Test: Monday, 10/7/19** **Due: 10/3/19**

Multiplying Polynomials

40) $(x + 11)(x - 5)$

41) $(x - 8)(x - 13)$

42) $(5x - 4)(3x + 7)$

43) $(x - 9)^2$

44) $(4x - 7)^2$

45) $(2x + 7)^2$

46) $(5x - 4)^2$

Name _____ **September 26, 2019**

Alg1 Q1 Test 1 **Test: Monday, 10/7/19** **Due: 10/3/19**

47) $(6x - 1)^3$

48) $(9x + 4)^3$

49) $(3x^2 - 5x + 4)(7x^2 + x - 6)$

50) $(3x^2 + 4x - 10)(9x^2 - 5x - 6)$