

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

**Part I:**

1) Evaluate:  $108 \div (61 - 7^2) - 48 \div (-\frac{3}{4}) =$

2)  $x = -4$  and  $y = 7$   
 $yx^3 - xy^2 + 11xy$

3)  $x = -3$   
 $12x^2 - 2x^3 \div (2x + 12) + 6x$

4) Is  $(-3, 7)$  a solution for both  
of the following equations?

$$\begin{aligned} 9x - 5y &= 62 \\ y - 3 &= 4(x + 4) \end{aligned}$$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

6) Is  $(7, -2)$  a solution for both of the following equations?

$$\begin{aligned}y + 10 &= \frac{1}{2}(x + 9) \\4x - 3y &= 34\end{aligned}$$

7) Is  $(\frac{1}{2}, -8)$  a solution for both of the following equations?

$$\begin{aligned}12x - 5y &= 46 \\y - 2 &= 10(x + \frac{1}{2})\end{aligned}$$

8) Evaluate each problem in  $\sqrt{b^2 - 4ac}$  (If not a perfect square, simplify the radical)

a) when  $a = 3$ ,  $b = -4$ , and  $c = -7$

b) when  $a = -6$ ,  $b = -17$ , and  $c = -7$

c) when  $a = 7$ ,  $b = 6$ , and  $c = 2$

d) when  $a = 2$ ,  $b = -8$ , and  $c = -4$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

**Part I: Answer Key:**

- |                                                               |          |       |                 |
|---------------------------------------------------------------|----------|-------|-----------------|
| 1) 73                                                         | 2) -560  | 3) 99 | 4) 0            |
| 5) No, it doesn't work in the 1 <sup>st</sup> equation        | 6) Yes   |       |                 |
| 7) No, it is not a solution for the 2 <sup>nd</sup> equation. | 8) a) 10 | b) 11 | c) $2\sqrt{23}$ |
|                                                               |          |       | d) $4\sqrt{6}$  |

**Part II:**

**Simplify Each Radical**

1)  $\sqrt{432}$                           2)  $\sqrt{150}$                           3)  $\sqrt{512}$

4)  $\sqrt{605}$                           5)  $\sqrt{320}$                           6)  $\sqrt{343}$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

7)  $\sqrt{576}$

8)  $\sqrt{375}$

9)  $\sqrt{704}$

10)  $\sqrt{507}$

11)  $\sqrt{289}$

12)  $\sqrt{252}$

**Part II Answer Key:**

1)  $12\sqrt{3}$

1) 24

2)  $5\sqrt{6}$

8)  $5\sqrt{15}$

3)  $16\sqrt{2}$

9)  $8\sqrt{11}$

4)  $11\sqrt{5}$

10)  $13\sqrt{3}$

5)  $8\sqrt{5}$

11) 17

6)  $7\sqrt{7}$

12)  $6\sqrt{7}$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

Part III: Simplify and Combine Like Terms

**YOU MUST SHOW ALL WORK!**

1)  $(22x - 13) + (9 - 19x)$

2)  $(16x + 7) - (13x - 11)$

3)  $8(5x - 7) + 9(7x + 12)$

4)  $12(5x + 6) - 4(15x + 18)$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

$$5) 8(6x^2 - 9x - 3) - 6(-8x^2 - 12x + 7)$$

$$6) 3(11x^2 - 9x + 6x) + 9(-4x^2 - 3x - 2)$$

$$7) (14x - 11) + (6x + 9)$$

$$8) (8x^2 - 5x + 7) - (9x^2 - 7x + 10)$$

$$9) 7(4x - 5) + 2(14x + 15)$$

$$10) 9(7x - 6) - 6(10x + 11)$$

Name \_\_\_\_\_  
Alg1

July 15, 2019  
Summer School Absent Assignment

$$11) 5(6x^2 - 2x + 12) - 10(3x^2 - x + 6) \quad 12) 11(-5x^2 + 3x - 6) + 8(7x^2 - 4x + 8)$$

**Part III: Review Answer Key:**

$$\begin{array}{llllll} 1) 3x - 4 & 2) 3x + 18 & 3) 103x + 52 & 4) 0 & 5) 96x^2 - 66 & 6) -3x^2 - 36x - 18 \\ 7) 20x - 2 & 8) -x^2 + 2x - 3 & 9) 56x - 5 & 10) 3x - 120 & 11) 0 & 12) x^2 + x - 2 \end{array}$$