

Part I: Order of Operations

1) $21 - 12 \cdot 3 + 5 =$

2) $100 - 12^2 \cdot (-\frac{1}{2}) + (8)(-2) =$

3) $6 - 18 \div (-3) \cdot 2 + 12 =$

4) $x = -5: 3x^2 \div (8x + 55) - 6x =$

5) $x = -4 \quad 3x^2 \div (10 + 2x) \cdot (\frac{1}{2}) - 11x$

6) Check to see if the ordered pair is a solution in BOTH equations: Yes or No? _____

(10, -3)

$$y - 11 = -\frac{1}{2}(2x + 8)$$

$$3x - 11y = -3$$

7) Check to see if the ordered pair is a solution in BOTH equations: Yes or No? _____

($-\frac{3}{4}$, -13)

$$y - 3 = 2(4x - 5)$$

$$8x - 3y = 33$$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

8) Evaluate each problem in $\sqrt{b^2 - 4ac}$

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

b) when $a = 10$, $b = -1$, and $c = -3$

c) when $a = -4$, $b = 16$, and $c = 9$

d) when $a = 4$, $b = -13$, and $c = 10$

Answer Key:

- | | | | | |
|--|----------|-------|-------|-------|
| 1) -10 | 2) 156 | 3) 30 | 4) 35 | 5) 56 |
| 6) No, it doesn't work in the 2 nd equation | | | | |
| 7) Yes | 8) a) 10 | b) 11 | c) 20 | d) 3 |

Part II: Equations

1) $10x - 8 = -33$

2) $34 - 6x = -14$

3) $\frac{2}{3}x + 15 = 33$

4) $-23 - \frac{5}{8}x = 7$

5) $(x/7) + 40 = 43$

6) $24 - (x/5) = 30$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

$$7) (6x - 5) - (10x - 11) = 34$$

$$8) 4(3x - 7) + 6(3x + 4) = -49$$

$$9) 6(5x - 4) - 4(7x - 9) = 36$$

$$10) 6(4x - 5) - 5(7x - 6) = -110$$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

$$11) 5(3x - 2) = 4(6x + 11)$$

$$12) 8(5x - 3) = 6(5x + 1)$$

$$13) \frac{4(6x - 4) - 3}{11} = 7$$

$$14) \frac{4(3x + 3)}{6} + 8 = -8$$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

$$15) \frac{6(4x - 3) + 3}{7} = 15$$

$$16) \frac{5(2x - 6)}{12} - 15 = -10$$

$$17) 5|6x - 36| + 19 = 259$$

$$18) -3|5x + 30| - 9 = -39$$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

$$19) -2|14x - 35| - 35 = 175$$

$$20) 2|\frac{1}{2}x + 8| - 5 = 59$$

$$21) 6|4x - 12| - 225 = -9$$

$$22) 4|5x - 10| + 52 = 12$$

Review Due: Wednesday, December 5
Test: Thursday, December 6

Q2 Test 1 Review

23) $4 \left| \frac{1}{3}x - 12 \right| - 80 = -8$

24) $\frac{2}{3} |24 - 8x| + 17 = 33$

Answer Key

1) $x = -\frac{5}{2}$

2) $x = 8$

3) $x = 27$

4) -48

5) $x = 21$

6) $x = -30$

7) $x = -7$

8) $x = -\frac{3}{2}$

9) $x = 12$

10) $x = 10$

11) $x = -6$

12) $x = 3$

13) $x = 4$

14) $x = -9$

15) $x = 5$

16) $x = 9$

17) $x = \{-2, 14\}$

18) $x = \{-8, -4\}$

19) No Solution

20) $x = \{-80, 48\}$

21) $x = \{-6, 12\}$

22) No Solution

23) $x = \{-18, 90\}$

24) $x = \{0, 6\}$