Christ the King Diocesian HIgh School

Algebra 2

Summer Math Packet

This packet will help you review basic algebra concepts.

- Please show all your work. No work No Credit!!!
  (if you need more room use loose leaf paper to do your work and staple it to the corresponding worksheet)
- You will be expected to do a worksheet every week.
- Do not wait to do all of the worksheets at one time.
- This packet will be due Wednesday August 16, 2023

Proposed schedule

Worksheet	Date: Week of
Worksheet 1	June 5
Worksheet 2	June 12
Worksheet 3	June 19
Worksheet 4	June 26
Worksheet 5	July 3
Worksheet 6	July 10
Worksheet 7	July 17
Worksheet 8	July 24

Teacher/User Name: L. Taylor
Alg 2 Summer Math Page 1 Divisibility

Name:_____
Period: _____ Date: _____

Solve

1) I am a number between 300 and 310. I am divisible by 4 and 7. What number am I?

2) I am a number between 240 and 250. I am divisible by 7 and 5. What number am I?

3) I am a number between 630 and 640. I am divisible by 4 and 3. What number am I?

4) I am a number between 320 and 330. I am divisible by 2 and 7. What number am I?

5) I am a number between 150 and 160. I am divisible by 4 and 3. What number am I?

6) I am a number between 790 and 800. I am divisible by 3 and 5. What number am I?

7) I am a number between 20 and 30. I am divisible by 3 and 7. What number am I?

8) I am a number between 10 and 20. I am divisible by 4 and 3. What number am I?

9) I am a number between 140 and 150. I am divisible by 3 and 7. What number am I?

10) I am a number between 760 and 770. I am divisible by 9 and 5. What number am I?

Teacher/User Name: L. Taylor

Alg 2 Summer Math Page 2 Solving Multi-Step Equations

Name:_____

Period: _____ Date: _____

Solve for x:

1) $0 = -x - (-3x - 4)$

2) $3(-4x + 2) - 3x + 2 = 53$

3) $x + 2(-5x - 4) = -35$

4) $(x + 1) - 2x = -1$

5) $37 = -3x + 5 + 2(-3x - 2)$

6) $-3(x - 5) + x = 9$

7) $5 - (-3x + 1) = -2$

8) $4 + 4(-3x - 4) = 12$

9) $2 = -(-x + 4) + x + 2$

10) $19 = 4(x + 2) - 2x + 3$

Teacher/User Name: L. Taylor

Alg 2 Summer Math Page 3 Solving Equations x on both Sides

Name:_____

Period: _____ Date: _____

Solve for x:

1) $-2x - 3 = 2x + 9$

2) $-4x - 2 = 4x + 14$

3) $4x + 2 = -4x - 22$

4) $-3x + 1 = x - 15$

5) $-2x = 4x - 6$

6) $4x + 3 = -2x - 9$

7) $-4x + 2 = -3x$

8) $4x + 5 = -4x + 5$

9) $-5x - 4 = -4x - 9$

10) $-3x + 2 = -3x + 1$

Teacher/User Name: L. Taylor

Alg 2 Summer Math Page 4 Solving Equations x on both Sides

Name:_____

Period: _____ Date: _____

Solve for x:

1) $-4x - 5 = 2x - 17$

2) $-x - 4 = x - 12$

3) $x - 4 = -x + 4$

4) $-x + 2 = -5x - 6$

5) $3x + 4 = -2x + 24$

6) $4x + 2 = -x + 12$

7) $-x + 4 = -3x + 4$

8) $-4x - 4 = -5x - 6$

9) $-3x + 1 = x + 9$

10) $-5x = -x - 16$

Teacher/User Name: L. Taylor

Alg 2 Summer Math Page 5 Using Distributive Laws

Name:_____

Period: Date:

Solve:

1) $(2x + 1)2 =$ ____ +____

2) $4(-d -5) =$ ____ +____

3) $-4(s -3) =$ ____ +____

4) $s(-3s -1) =$ ____ +____

5) $(-3f^2 -2f + 2)5f =$ ____ +____ +____

6) $(x -4)x =$ ____ +____

7) $-5(-2u -4) =$ ____ +____

8) $(-k + 5)k =$ ____ +____

9) $(b^2 -2b + 1)3 =$ ____ +____ +____

10) $3(x + 3) =$ ____ +____

Teacher/User Name: L. Taylor

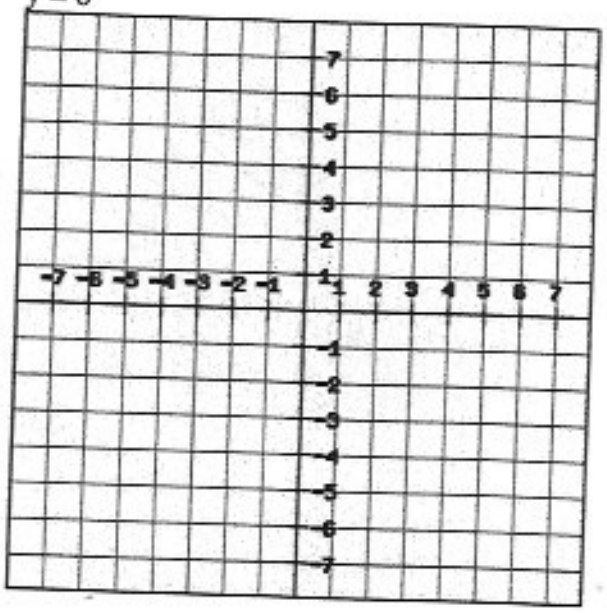
Alg 2 Summer Math Page 6 Graphing Slope Intercept Form

Name:_____

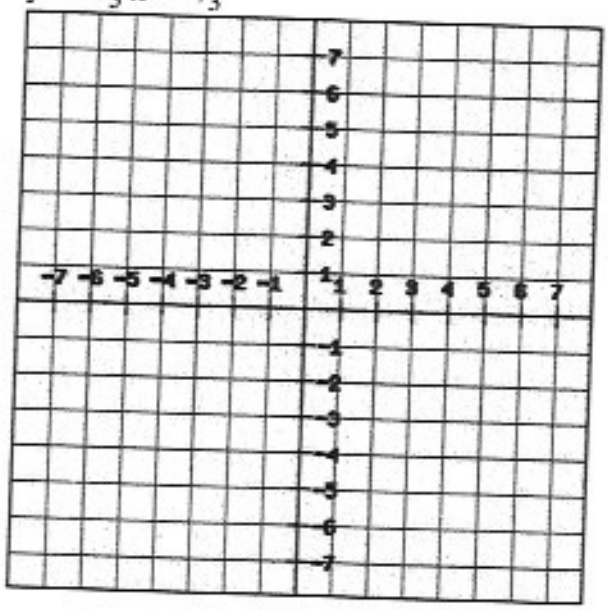
Period: _____ Date: _____

Graph the Line

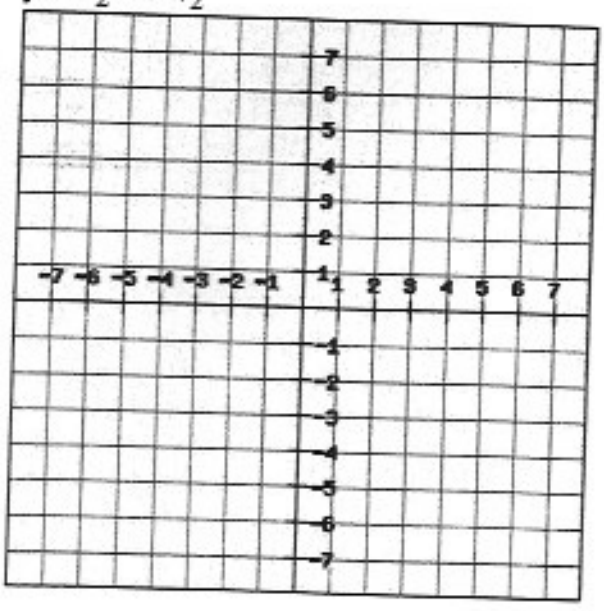
1) $y = 0$



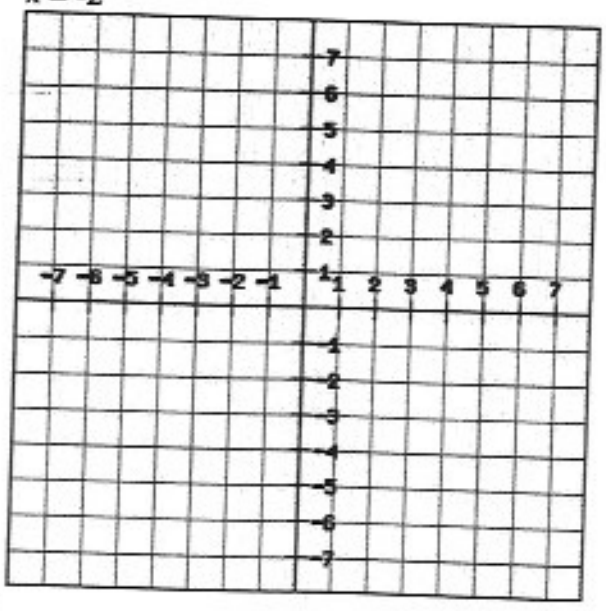
2) $y = {}^{-4}/_{3}\,x - {}^{16}/_{3}$



3) $y = {}^{1}/_{2}\,x + {}^{3}/_{2}$



4) $x = -2$



Teacher/User Name: L. Taylor

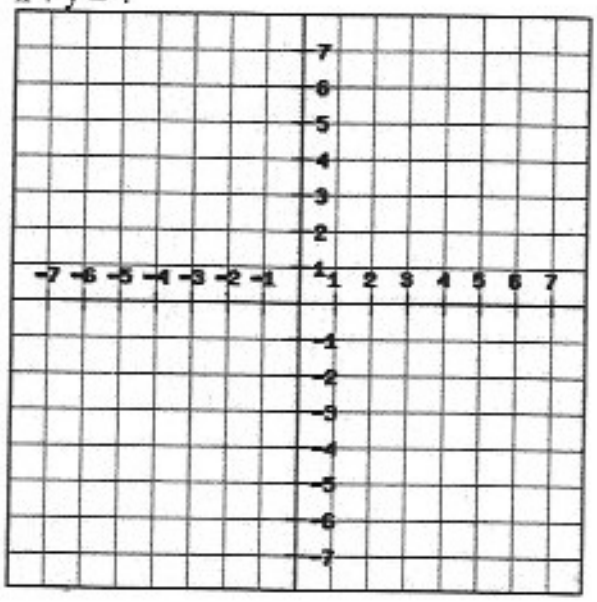
Alg 2 Summer Math Page 7 Graphing using x & y intercepts

Name:_____

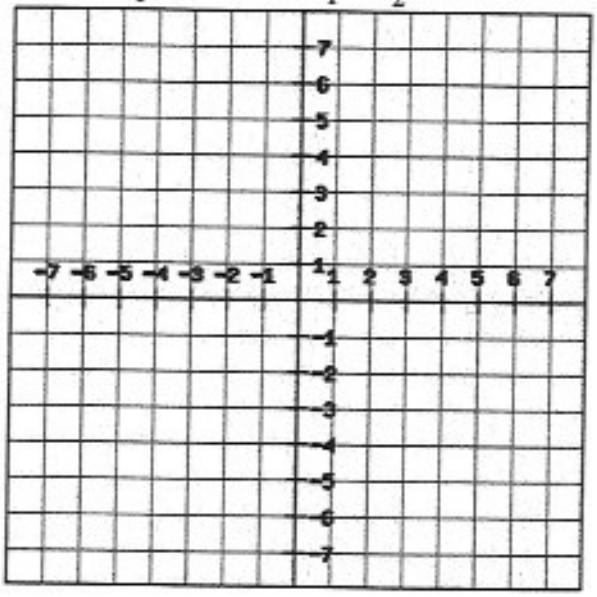
Period: _____ Date: _____

Graph the Line

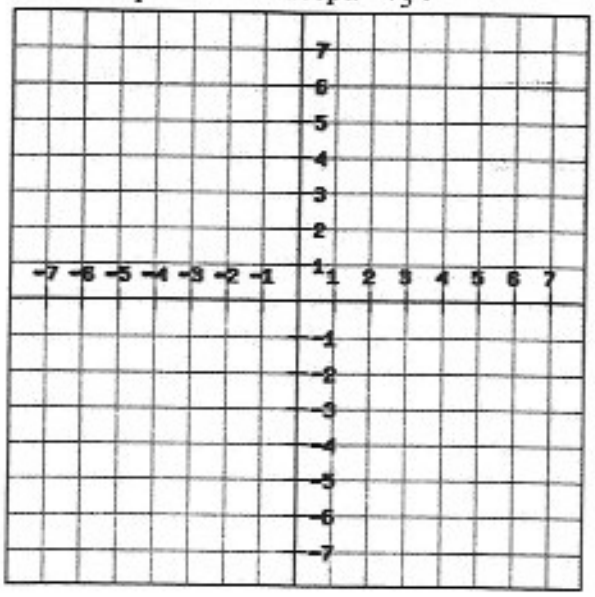
1) $x + y = 4$



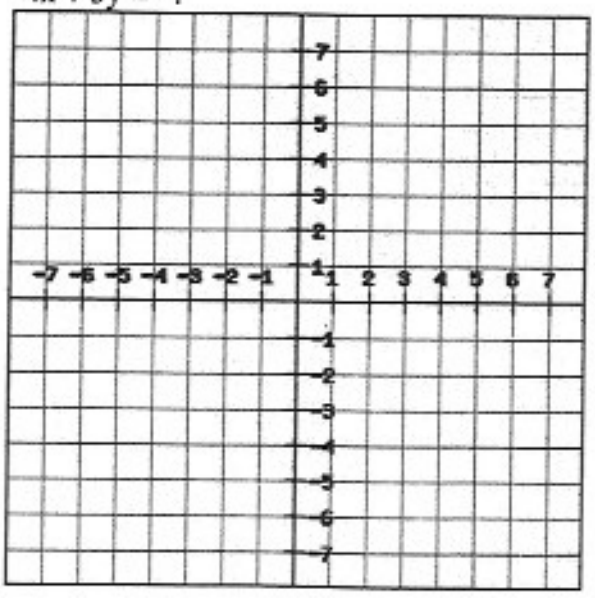
2) X-intercept: -2 Y-intercept: $^{3}/_{2}$.



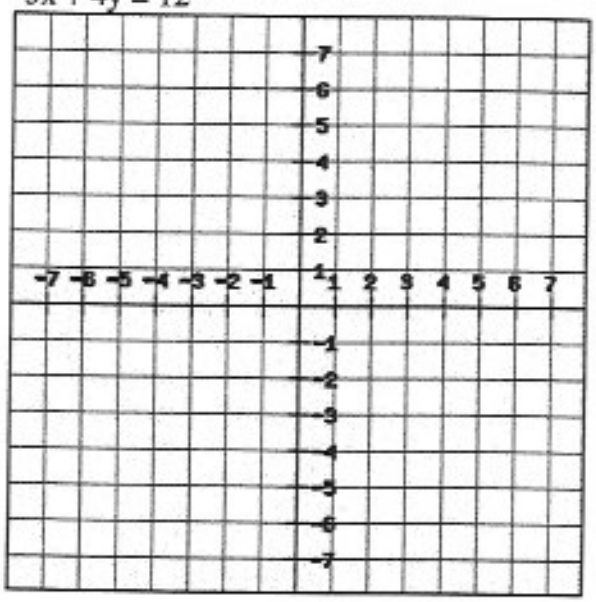
3) X-intercept: -1 Y-intercept: $^{-4}/_{3}$.



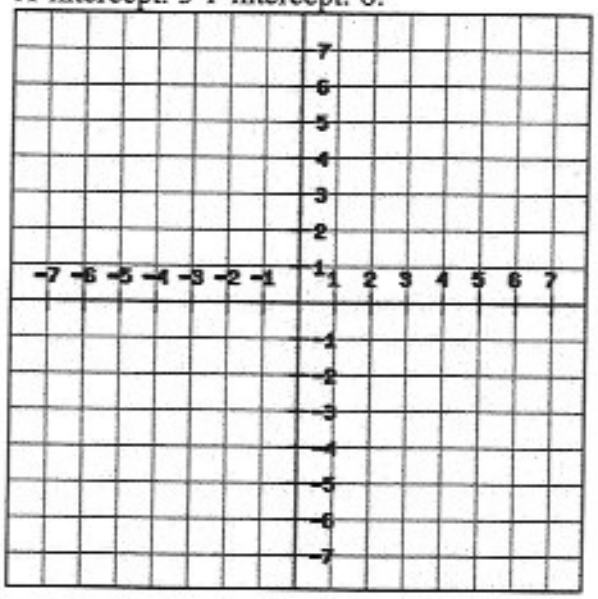
4) $-4x + 3y = -4$



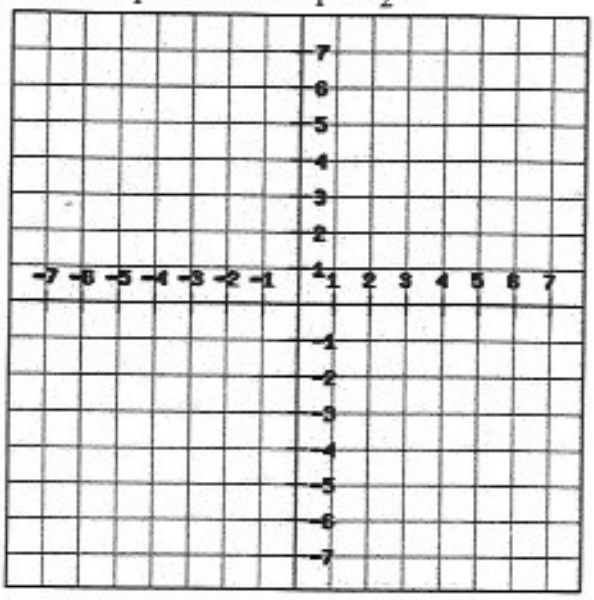
5) $-3x + 4y = 12$



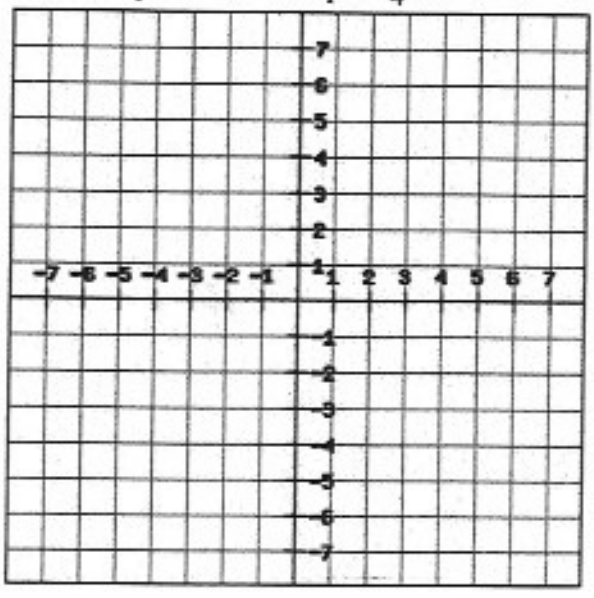
6) X-intercept: 3 Y-intercept: 6.



7) X-intercept: 1 Y-intercept: $^3/_2$.



8) X-intercept: -3 Y-intercept: $^9/_4$.



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Alg 2 Summer Math Page 8 Multiplying Monomials

Name:_____

Period: _____ Date: _____

Simplify:

1) $(5a^2s)(a^2s^{-1})$

2) $(5t^2)(-3t^{-3})$

3) $(-2h^3)(4h)$

4) $(c)(-3)$

5) $(-2)(y)$

6) $(-2d^{-3})(d)$

7) $(3s^{-3})(2s^{-1})$

8) $(-4)(-3t^3)$

9) $(5a^2u^2)(-5a^3u)$

10) $(a^2n)(a^3)$