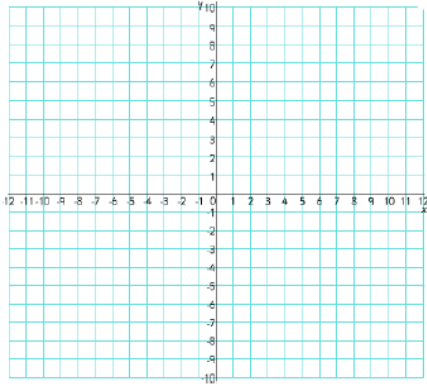


Geometry Summer Review

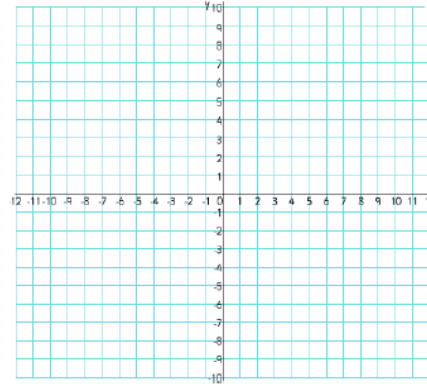
★ Objective A: I can find the slope of a line

[Introduction to Slope Video](#)

1. $(2, -1)$ and $(4, 2)$; $m =$ _____



2. $(-2, 1)$ and $(2, 5)$; $m =$ _____



A3. Through $(5, 1)$ and $(2, 7)$

A4. Through $(5, 2)$ and $(2, -3)$

A5. Through $(-3, 1)$ and $(7, 1)$

A6. Parallel to a line with slope 4

A7. Parallel to a line with slope -4

A8. Parallel to a line with slope $\frac{1}{2}$

A9. Perpendicular to a horizontal line

A10. Perpendicular to a line with slope $\frac{3}{2}$

A11. Perpendicular to a line with a slope -1

A12. Perpendicular to a line with slope $-\frac{5}{3}$

★ Objective B: I can write equations of lines

<http://www.virtualnerd.com/algebra-2/linear-equations-functions/writing/>

<https://www.khanacademy.org/math/algebra/two-var-linear-equations/writing-slope-intercept-equations/a/writing-slope-intercept-equations>

<https://www.khanacademy.org/math/algebra/two-var-linear-equations/point-slope/v/idea-behind-point-slope-form>

<https://www.khanacademy.org/math/algebra/two-var-linear-equations/forms-of-two-var-linear-equations/v/point-slope-and-standard-form>

- B1. Write the equation of the line through (0, -3) and (6, 7)

 - B2. Write the equation of the line with slope -3 through (5, -1)

 - B3. Write the equation of the vertical line through (3, 7)

 - B4. Write the equation of the line that passes through (6, -2) and the y-intercept of $y = 3x - 6$

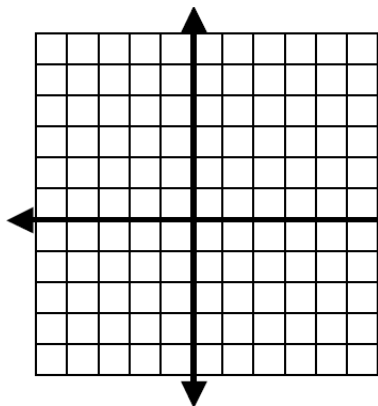
 - B5. Write the equation of the line with slope $\frac{2}{3}$ through (0, -9)

 - B6. Write the equation of a horizontal line through (-3, -10)
-

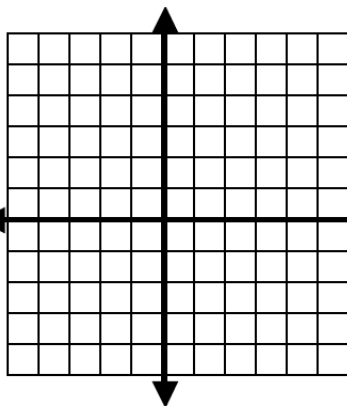
★ Objective C: I can graph a line

<https://www.khanacademy.org/math/algebra/two-var-linear-equations/graphing-slope-intercept-equations/a/graphing-slope-intercept-form>

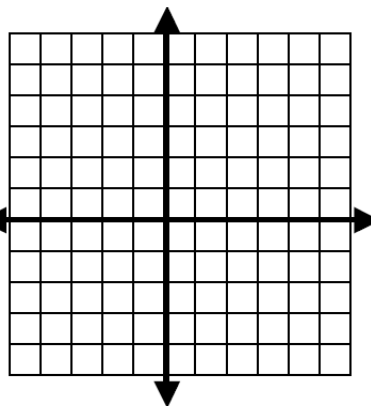
C1. $y = x$



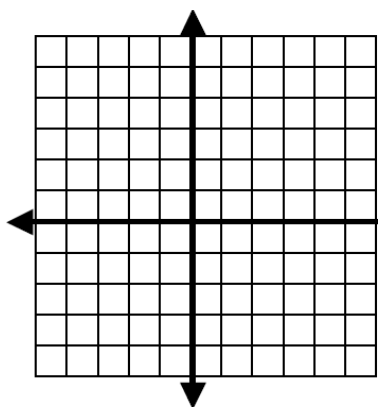
C2. $y = 2x - 3$



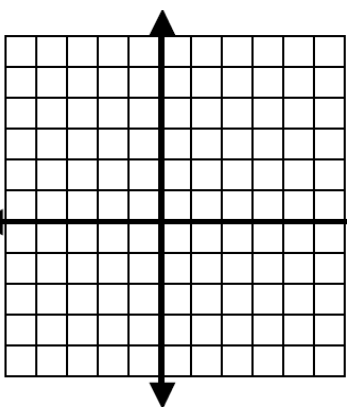
C3. $y = \frac{1}{2}x + 4$



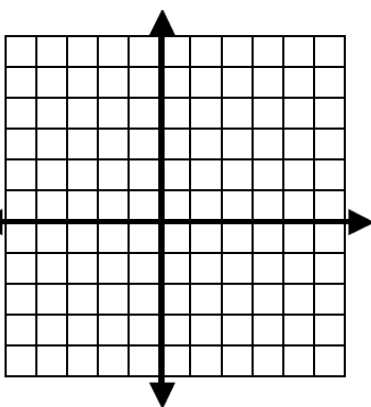
C4. $y = -3x$



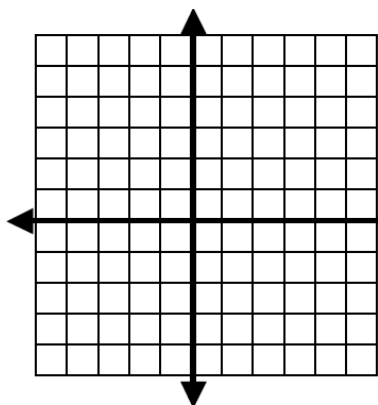
C5. $y = \frac{2}{5}x - 1$



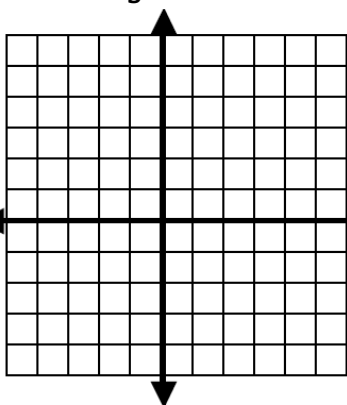
C6. $y - 2 = 4(x - 2)$



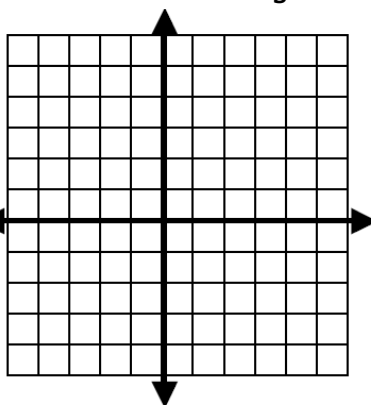
C7. $x = 3$



C8. $y = -6$



C9. $2x + 4y = 8$



★ Objective D: I can solve linear equations

<https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/why-we-do-the-same-thing-to-both-sides-multi-step-equations>

<https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/solving-equations-2>

D1. $2p + 5 = 13$

D2. $12 + 2b = 2 + 5b$

D3. $4x + 5 + 5x = 140$

D4. $2(4x + 4) = x + 1$

D5. $4 - 3(2 - x) = -14$

D6. $7x - 8x + 4 = 5x - 2$

★ Objective E: I can solve a proportion

<https://www.khanacademy.org/math/algebra-basics/core-algebra-linear-equations-inequalities/ratios-core-algebra/v/find-an-unknown-in-a-proportion>

<https://www.khanacademy.org/math/algebra-basics/core-algebra-linear-equations-inequalities/ratios-core-algebra/v/proportions-2-exercise-examples>

E1. $\frac{7}{2} = \frac{n}{3}$

E2. $\frac{25}{15} = \frac{10}{x}$

E3. $\frac{3x}{7} = \frac{9}{2}$

E4. $\frac{x+4}{5} = \frac{x-2}{3}$

E5. $\frac{4}{x-3} = \frac{6}{x+3}$

E6. $\frac{10}{6x+7} = \frac{6}{2x+9}$

★ Objective F: I can solve a quadratic equation

[Solving quadratic equations by factoring video](#)

Solve.

E1. $4x^2 - 9 = 0$

E2. $x^2 - 4x - 32 = 0$

E3. $x^2 - 3x = 0$

E4. $2x^2 + 13x - 7 = 0$

E5. $3x^2 = -x + 4$

E6. $x^2 + 12x + 10 = 5x$

★ Objective G: I can simplify radicals

[Simplifying square roots video](#)

Simplify:

G1. $\sqrt{49}$

G2. $\sqrt{\frac{1}{4}}$

G3. $\sqrt{\frac{36}{49}}$

G4. $2\sqrt{144}$

G5. $\sqrt{196}$

G6. $\sqrt{289}$