ALGEBRA 2 - DAY ONE!

Name: _____

Circuit Style: Start your brain training in Cell #1, search for your answer. Label that block as Cell #2 and continue to work until you complete the entire exercise for your Algebra 2 Brain Training.

Answer: $y = \frac{1}{2}x - 7$

#1

Find the slope of the line containing the points (5, – 4) and (– 3, – 6).

Answer: $x^2 + xy - 6y^2$

Simplify, no negative exponents.

$$\frac{-45x^6y^2}{9x^3y^7}$$

Answer: $2x^3 - 5x^2 - 7x - 2$

Factor Completely: $2x^3 - 2x^2 - 24x$

Answer: $(4, 5)$

Multiply and simplify:

$$\sqrt{10x^2y^3} \cdot \sqrt{2x^2y}$$

Answer: $(2x - 3)(x + 5)$

Write the equation of a line with a slope of 3 and passing through the point $(-5, -7)$.

Answer: $\frac{1}{4}$

Solve for y: 2x+ 3y = 12

Answer: $-9 \leq x \leq 3$

Solve by the addition method.

$$\begin{cases} 2x + y = 13 \\ 3x - y = 7 \end{cases}$$

Answer: $\{-7, 3\}$

Write an equation of the line containing the point $(6, -4)$ and perpendicular to the line $y = -2x - 3$.

Answer: $8x^2 - x + 1$

Multiply: $(2x + 1)(x^2 - 3x - 2)$

Answer: $-\frac{5x^3}{y^5}$

Factor completely: $2x^2 + 7x - 15$

Answer: $y = -\frac{2}{3}x + 4$

Simplify: $3(2x - y) - (5x + 4y - 2)$

Answer: $2x - 3y \leq 12$

Solve: $4|x + 3| \leq 24$

Answer: $2x^2y^2\sqrt{5}$

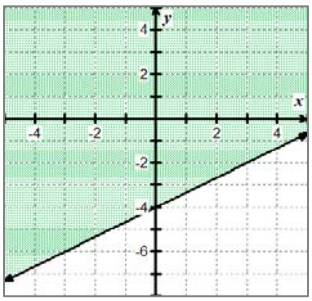
Solve by factoring: $x^2 + 4x - 21 = 0$

Answer: $y = 3x + 8$

Subtract: $(6x^2 - 4x + 3) - (2 - 3x - 2x^2)$

Answer: $2x(x + 3)(x - 4)$

Write the inequality:



Answer: $x - 7y + 2$

Multiply: $(x + 3y)(x - 2y)$

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Name: _____

Circuit Style: Start your brain training in Cell #1, search for your answer. Label that block as Cell #2 and continue to work until you complete the entire exercise for your Algebra 2 Brain Training.

Answer: $y = \frac{1}{2}x - 7$

#1

Find the slope of the line containing the points (5, – 4) and (– 3, – 6).

Answer: $x^2 + xy - 6y^2$

#5

Simplify, no negative exponents.

$$\frac{-45x^6y^2}{9x^3y^7}$$

Answer: $2x^3 - 5x^2 - 7x - 2$

#10

Factor Completely: $2x^3 - 2x^2 - 24x$

Answer: $(4, 5)$

#14

Multiply and simplify:

$$\sqrt{10x^2y^3} \cdot \sqrt{2x^2y}$$

Answer: $(2x - 3)(x + 5)$

#7

Write the equation of a line with a slope of 3 and passing through the point $(-5, -7)$.

Answer: $\frac{1}{4}$

#2

Solve for y: 2x+ 3y = 12

Answer: $-9 \leq x \leq 3$

#13

Solve by the addition method.

$$\begin{cases} 2x + y = 13 \\ 3x - y = 7 \end{cases}$$

Answer: $\{-7, 3\}$

#16

Write an equation of the line containing the point $(6, -4)$ and perpendicular to the line $y = -2x - 3$.

Answer: $8x^2 - x + 1$

#9

Multiply: $(2x + 1)(x^2 - 3x - 2)$

Answer: $-\frac{5x^3}{y^5}$

#6

Factor completely: $2x^2 + 7x - 15$

Answer: $y = -\frac{2}{3}x + 4$

#3

Simplify: $3(2x - y) - (5x + 4y - 2)$

Answer: $2x - 3y \leq 12$

#12

Solve: $4|x + 3| \leq 24$

Answer: $2x^2y^2\sqrt{5}$

#15

Solve by factoring: $x^2 + 4x - 21 = 0$

Answer: $y = 3x + 8$

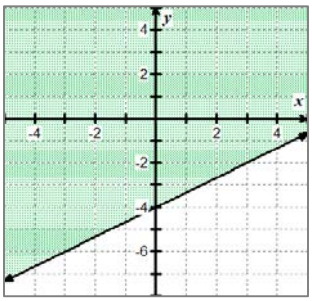
#8

Subtract: $(6x^2 - 4x + 3) - (2 - 3x - 2x^2)$

Answer: $2x(x + 3)(x - 4)$

#11

Write the inequality:



Answer: $x - 7y + 2$

#4

Multiply: $(x + 3y)(x - 2y)$