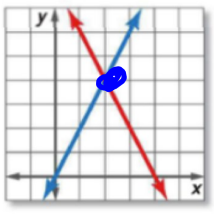
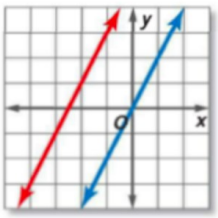
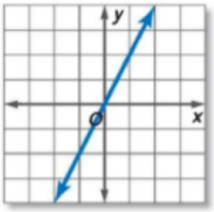
SOLVING SYSTEMS OF EQUATIONS

SYSTEM: 2 or More Equations

TYPES OF SOLUTION

Graph			
Number of Solutions	One	No Solution	Infinite
	Intersect	Parallel	Same Line

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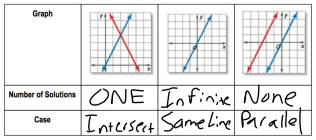
SOLVING SYSTEMS 3-WAYS

GRAPHING	**Solving Equations by Graphing**  Graph Number of Solutions: ONE | Infinite | None Case: Intersect | Same Line | Parallel
SUBSTITUTION	**SYSTEMS OF EQUATIONS: SUBSTITUTION** STEPS 1. Solve for single variable "x = / y = " 2. Substitute into 2nd Equation 3. Solve for "x/y" individually
ELIMINATION	**SYSTEMS OF EQUATIONS: ELIMINATION** STEPS 1. [Make] Something Cancel 2. Solve for 1st Variable 3. Substitute & Solve for 2nd Variable

SYSTEMS WILL CONTINUE IN ALG 2 & ETC.

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SYSTEMS IN CALCULATOR

1. Open A Calc. Page.
2. Menu (3) → Algebra (2) → Systems
3. Modify Var./Eqts.
4. Type & Solve

ALL SYSTEMS CAN BE SOLVED THIS WAY, SO YOU SHOULD NOT GET THEM WRONG

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EXAMPLE

$$0.25q + 0.10d = 2.85$$
$$q + d = 18$$

(7, 11)

q, d

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EXAMPLE

What is the solution to this system of equations?

$$10x - y = 53$$

$$y = \frac{-13x + 92}{2}$$

A (6, 7)

B (2, 33)

C (7, 6)

D (33, 2)

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1. ERROR -> Made Mistake

2. NO SOLUTION FOUND -> ∅ No Solution

3. c1, c2, etc. -> Inf. many (Same line)

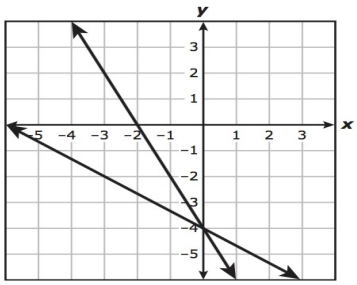
Apr 17-12:14 PM

EXAMPLE

Which graph can be used to find the solution to the system of equations below?

$$2x + y = -4$$
$$-3y = 2x + 12$$

F



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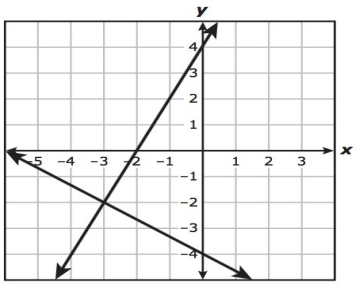
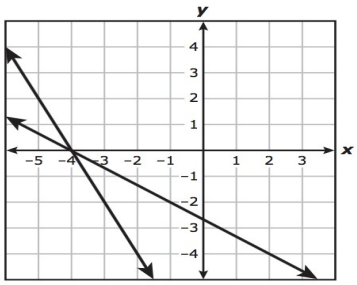
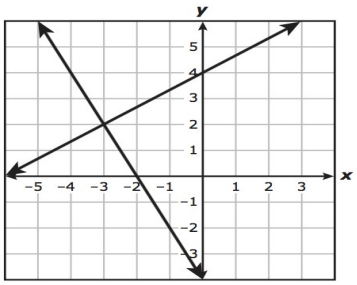


G



J



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MISTAKES

THERE SHOULD BE NONE, BECAUSE THE CALCULATOR CAN SOLVE THEM FOR YOU!

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