

Ch 4 Calendar

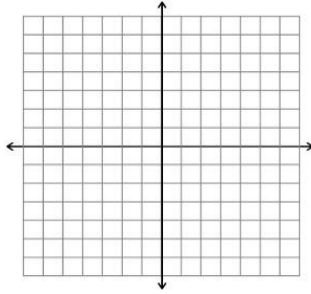
| Days | Dates | Assignment (due the next class meeting) |
|-----------------------|----------------------|---|
| Thursday Friday | 11/02/23 11/03/23 | 4.1 Worksheet |
| Monday Tuesday | 11/06/23 11/07/23 | 4.2 Worksheet |
| Wednesday Thursday | 11/08/23 11/09/23 | 4.3 Worksheet |
| Friday | 11/10/23 | Veteran's Day |
| Monday Tuesday | 11/13/23 11/14/23 | 4.4 Worksheet |
| Wednesday Thursday | 11/15/23 11/16/23 | Ch. 2 Review Worksheet |
| Friday Monday | 11/17/23 11/20/23 | Ch 4 Test No HW 😊 |

HW Hints:

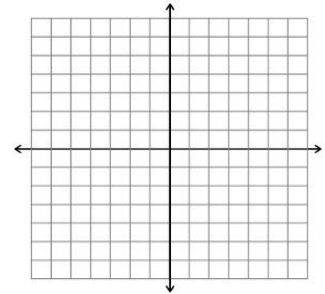
- All handouts, include the Notes packet and HW Packet, are available at www.washoeschools.net/DRHSmath
- See the **Links** Channel in Canvas to find our class YouTube page. Video lessons are available here for each section.
- Students who complete all assignments this semester by the date of the unit test for each chapter will receive a 2% bonus.
- Students with no late or missing assignments for this semester will receive a free pizza lunch.
- Assignments are due at the start of the next class meeting.
- Late assignments will be reduced by 50%.
- The last day to turn in assignments for this chapter is prior to the start of the test for this unit.

For #1-6: Solve each system of equations by graphing.

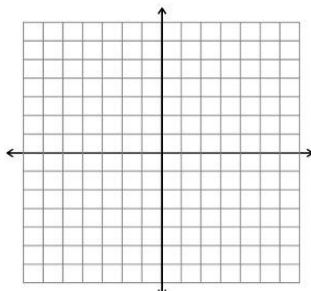
1) $\begin{cases} y = -x - 5 \\ y = x + 1 \end{cases}$



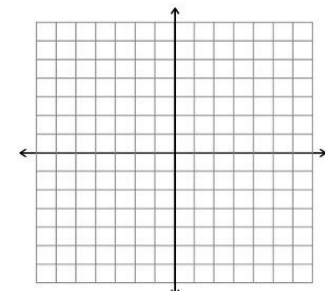
2) $\begin{cases} x = -2 \\ y = -\frac{1}{2}x + 4 \end{cases}$



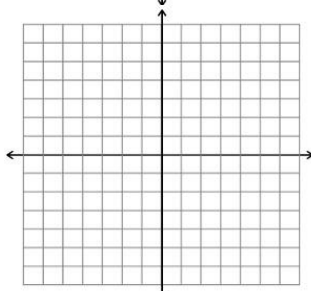
3) $\begin{cases} y = -2x + 3 \\ y = \frac{3}{2}x - 4 \end{cases}$



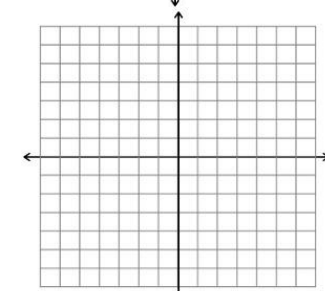
4) $\begin{cases} 2x + y = 6 \\ y = -2x + 6 \end{cases}$



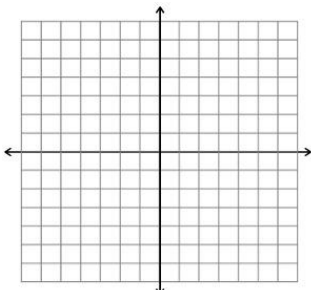
5) $\begin{cases} x = -3 \\ y = 2 \end{cases}$



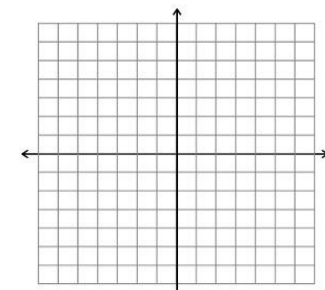
6) $\begin{cases} y = 3x - 4 \\ y = 3x + 1 \end{cases}$



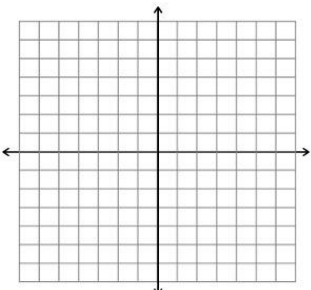
7) $\begin{cases} y = -x \\ -2x + 2y = 0 \end{cases}$



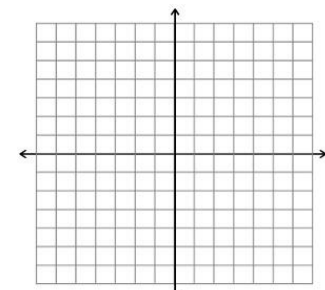
8) $\begin{cases} y = \frac{3}{4}x + 1 \\ y = -\frac{1}{2}x - 4 \end{cases}$



9) $\begin{cases} y = \frac{2}{5}x - 3 \\ y = \frac{2}{5}x + 4 \end{cases}$



10) $\begin{cases} 3x + y = -2 \\ y = -3x - 2 \end{cases}$



11) Which line(s) below would create a system with *no solution* along with the line $y = 3x + 2$? **Select all that apply.**

A) $y = 3(x + 5) - 4$

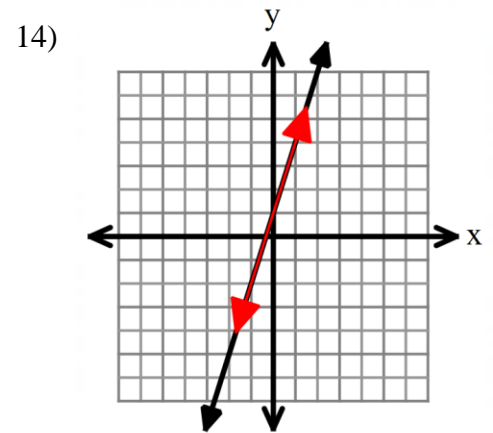
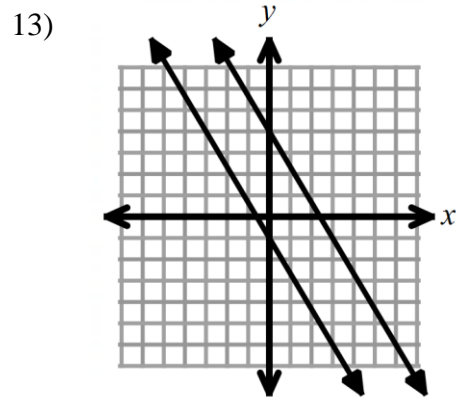
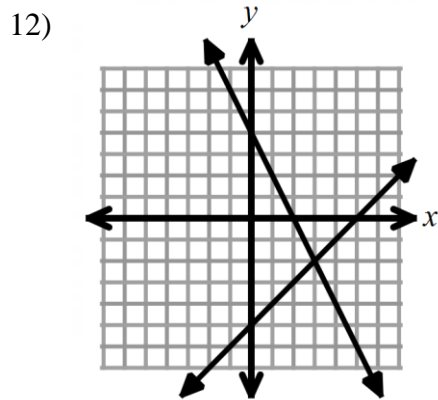
B) $y = 3x - 7$

C) $y = 3x + 10$

D) $-3x + y = 4$

4.1 Wk, continued.

For #12 – 14, what is the solution for each system shown?



4.1 Reflection

- A) What is one area of strength for your understanding so far in 4.1?

- B) What is something that you need more support with for 4.1?

- C) What resources, if any, did you use when completing this assignment?

- D) What is one goal for this unit?

For #1 – 8, solve each system of equations by using substitution.

1)
$$\begin{cases} y = 4 \\ x = -2y + 5 \end{cases}$$

2)
$$\begin{cases} 3x + 4y = 2 \\ x = -3y - 1 \end{cases}$$

3)
$$\begin{cases} y = 5x - 6 \\ 2x - y = 12 \end{cases}$$

4)
$$\begin{cases} y = -6x + 8 \\ y = 3x - 1 \end{cases}$$

5)
$$\begin{cases} 4x + 2y = 8 \\ y = -2x + 1 \end{cases}$$

6)
$$\begin{cases} y = 3x - 12 \\ y = -7x + 8 \end{cases}$$

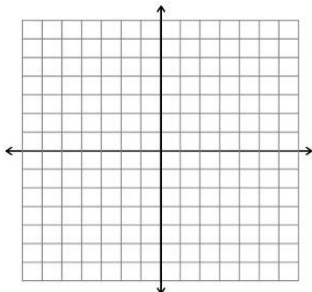
7)
$$\begin{cases} x = 3y + 2 \\ x = 5y - 20 \end{cases}$$

8)
$$\begin{cases} -5x + 5y = 30 \\ x = y + 6 \end{cases}$$

For #9 – 10, consider this system:
$$\begin{cases} y = -2x + 5 \\ y = -3 \end{cases}$$

Solve it twice, by the method specified below.

9) By graphing.



10) By substitution.

4.2 Reflection

A) What level of frustration did you experience while doing this assignment?

0

1

2

3

4

No frustration

A small amount of frustration

Frustrated half the time

Frustrated most the time

Frustrated all of the time

B) Use the scale below to determine how confident you are on each topic in the table below.

0

1

2

3

4

Not confident

Slightly confident

Confident half the time

Confident most the time

Confident all of the time

| Portion | Confidence Scale Value |
|--|------------------------|
| Plugging an expression into another equation. | |
| Solving for the first variable. | |
| Solving for the second variable. | |
| Writing your solution as an ordered pair. | |
| Deciding when a system has no solution or infinitely many solutions. | |

C) Are you proud of your effort on this assignment? Why or why not?

D) List a goal for your next assignment.

For #1 – 8: Use the elimination method to solve each system of equations. Show all work!

$$1) \begin{cases} x + 2y = 13 \\ -x + y = 5 \end{cases}$$

$$2) \begin{cases} -3x - 5y = -7 \\ -4x + 5y = 14 \end{cases}$$

$$3) \begin{cases} x + y = 1 \\ 2x - y = 5 \end{cases}$$

$$4) \begin{cases} 7x + 8y = 39 \\ 10x - 8y = -22 \end{cases}$$

$$5) \begin{cases} -2x + y = 1 \\ 2x - y = 5 \end{cases}$$

$$6) \begin{cases} -11y = -3x - 18 \\ 16y - 3x = 33 \end{cases}$$

$$7) \begin{cases} 10x + 2y = 12 \\ -10x = 2y - 12 \end{cases}$$

$$8) \begin{cases} x + y = 5 \\ x + 3y = 0 \end{cases}$$

4.3 Reflection

A) **How much do you agree with this statement?** I showed persistence on this assignment, because I tried the problems that were hard for me, and I gave my best effort even when it was challenging.

- 1) strongly disagree 2) disagree 3) agree 4) strongly agree

B) **How much do you agree with this statement?** When I felt frustrated on this assignment, I was able to calm myself down and then focus on trying the problems.

- 1) strongly disagree 2) disagree 3) agree 4) strongly agree

C) **How much do you agree with this statement?** When I needed help on this assignment, I used **appropriate** resources (such as my notes, watching a video, getting help from others) to try to understand the material.

- 1) strongly disagree 2) disagree 3) agree 4) strongly agree

D) Are you proud of your effort on this assignment? Why or why not?

For #1 – 8: Solve the linear system.

$$1) \begin{cases} x + y = 2 \\ 2x + 7y = 9 \end{cases}$$

$$2) \begin{cases} 3x - 2y = 8 \\ x + 3y = 10 \end{cases}$$

$$3) \begin{cases} 11x - 20y = 28 \\ 3x + 4y = 36 \end{cases}$$

$$4) \begin{cases} 5x - 3y = -7 \\ -2x + 4y = 0 \end{cases}$$

$$5) \begin{cases} x + y = 0 \\ -3x - 3y = 4 \end{cases}$$

$$6) \begin{cases} 4x + 12y = 8 \\ x + 3y = 2 \end{cases}$$

$$7) \begin{cases} 10x = 5y + 15 \\ 2x - 4y = -18 \end{cases}$$

$$8) \begin{cases} 6x - 2y = -2 \\ -5x + 3y = 11 \end{cases}$$

4.4 Self-Reflection

Part A) How well are you understanding Ch 4 so far? Consider each topic, and then measure your understanding between 0 (not understanding at all) and 5 (am able to help other students on this topic.)

| Topic | Ranking (0 to 5) |
|---|------------------|
| Solving a system by graphing | |
| Solving a system by using substitution | |
| Solving a system by using elimination | |
| Solving a system by using elimination with multiplication | |
| Determining if a system has no solution | |
| Determining if a system has infinitely many solutions | |

Part B) Evaluate your *effort* on the 4.4 lesson. Include your effort and focus during notes, as well as during the HW time. Share your thoughts below.

Part C) What is your goal for the **test** on this chapter? Write at least one goal below:

For #1 – 4, write a system of equations to model each situation. Do NOT solve the system.

1) Two brothers Jason and Michael couldn't decide if they wanted to take their kids to McDonalds or Burger King for their soccer team's win. Jason took his children to McDonald's, where it was \$3 per hamburger and \$3 per French fries. He spent \$24. Michael took his children to Burger King, where it was \$3 per hamburger, but \$2 for the fries. He spent \$20. Let x = # of hamburgers and y = # of fries.

3) A pet store sells angel fish for \$6 each and clown fish for \$4 each. The pet store sold five fish for a total of \$24. Write a system to model this situation. Let x = # angel fish and y = # clown fish.

2) T-Shirts R Us charges \$12 per shirt, plus a set-up fee of \$35. Amazing Shirts charges \$15 per shirt, plus a set-up fee of \$20. Let x = # of shirts purchased, and y = total cost.

4) Green Landscaping Company charges \$60 per hour, plus a one-time fee of \$80. Local Landscaping Company charges \$75 per hour, plus a one-time fee of \$50. Write a system to model this equation. Let x = # of hours and y = total cost.

For #5 – 6, write a system of equations to model this system. Then solve the system.

5) Victoria purchases 7 items from the grocery store, and she only buys apples and oranges. If apples cost \$2 per pound and oranges cost \$3 per pound, and Victoria spent \$16, then how many pounds of each type of fruit did she purchase?

6) Jenny and Bob are competing with one another to see who can sell the most cookies and wrapping paper for their school's fundraiser. Jenny's grade is selling wrapping paper for \$10 per roll and cookies for \$3 per bucket. She ended up making \$165 total. Bob's grade is selling the wrapping paper for \$10 and a bucket of gourmet cookies for \$7 per bucket. He ended up making \$185 total. If they tied and sold the same amount of wrapping paper and cookies, how many of each did they sell?

For #7 – 8, write a system of equations to model this system. Then solve the system.

7) A pet store sells angel fish for \$6 each and clown fish for \$4 each. If the pet store sold five fish for a total of \$24, how many of each type of fish were sold? Let $x = \#$ angel fish and $y = \#$ clown fish. (Use your system from #3.)

8) Amy and Tony each have a babysitting business. Amy charges \$10 per hour, plus a one-time fee of \$20. Tony charges \$15 per hour, but he does not charge a one-time fee. Find the number of hours where they would charge the same amount. Also, how much would that amount be?

4.5 Reflection

A) **How much do you agree with this statement?** I showed persistence on this assignment, because I tried the problems that were hard for me, and I gave my best effort even when it was challenging.

1) strongly disagree 2) disagree 3) agree 4) strongly agree

B) **How much do you agree with this statement?** When I felt frustrated on this assignment, I was able to calm myself down and then focus on trying the problems.

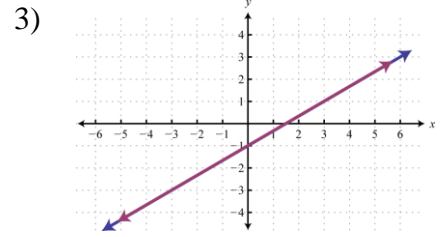
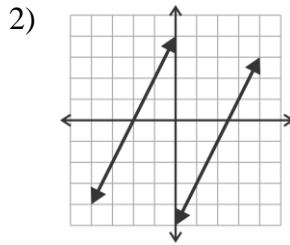
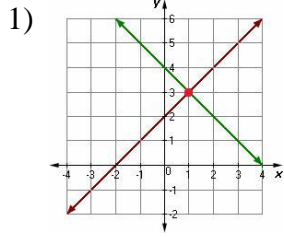
1) strongly disagree 2) disagree 3) agree 4) strongly agree

C) **How much do you agree with this statement?** When I needed help on this assignment, I used **appropriate** resources (such as my notes, watching a video, getting help from others) to try to understand the material.

1) strongly disagree 2) disagree 3) agree 4) strongly agree

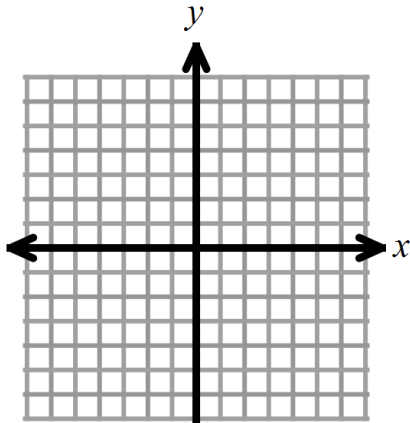
D) Are you proud of your effort on this assignment? Why or why not?

For #1 – 3: What is the solution for each system shown?

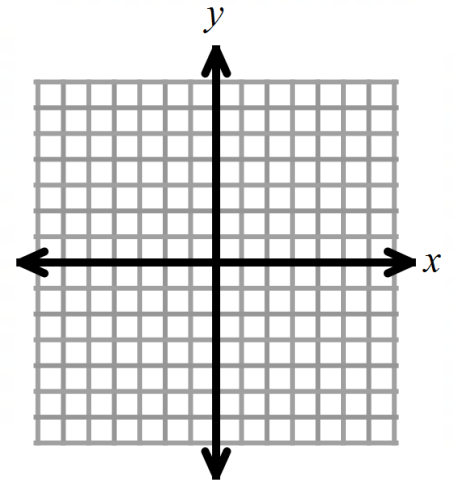


For # 4 – 7: Solve each system by graphing.

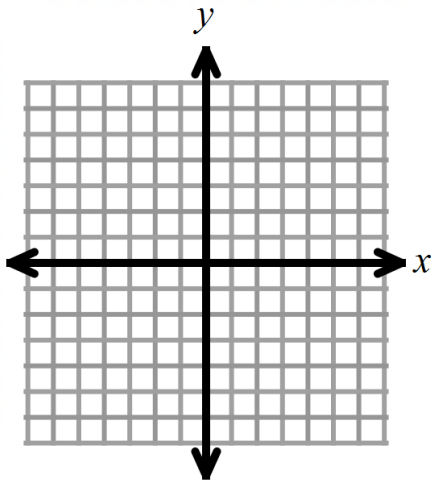
4) $\begin{cases} y = 3x - 5 \\ y = -2x \end{cases}$



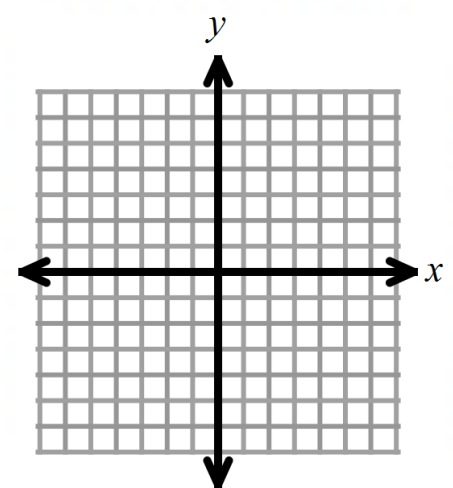
5) $\begin{cases} y = \frac{1}{2}x - 5 \\ y = \frac{1}{2}x + 1 \end{cases}$



6) $\begin{cases} y = 5 \\ x = -1 \end{cases}$



7) $\begin{cases} 3x + y = 5 \\ y = -3x + 5 \end{cases}$



For #8 – 9: Solve each system by using substitution.

8) $\begin{cases} 4y - 2x = -38 \\ x = 5 \end{cases}$

9) $\begin{cases} y = 6x - 5 \\ y = 5x + 4 \end{cases}$

Ch 4 Rev Wk, continued...

For #10 – 11: Solve each system by using substitution.

$$10) \begin{cases} 2x - 4y = 10 \\ y = x - 4 \end{cases}$$

$$11) \begin{cases} x = 3y - 3 \\ 4x - 12y = 7 \end{cases}$$

For #12 – 17: Solve each system by using elimination.

$$12) \begin{cases} 2x + 5y = 12 \\ x - 5y = -9 \end{cases}$$

$$13) \begin{cases} 3x - 2y = 10 \\ 3x - 5y = -2 \end{cases}$$

$$14) \begin{cases} 5x + 3y = 11 \\ -2x + y = 0 \end{cases}$$

$$15) \begin{cases} x + 4y = 30 \\ -4x + 5y = -15 \end{cases}$$

$$16) \begin{cases} 2x + 2y = 8 \\ -2x - 2y = 11 \end{cases}$$

$$17) \begin{cases} 7x - 11y = 40 \\ 7x = 11y + 40 \end{cases}$$

Ch 4 Rev Wk, continued...

For #18 – 19: Set up a system to model each situation. Do NOT solve the system.

18) Tickets for admission to a high school football game cost \$3 for students and \$5 for adults. During one game, \$2995 was collected from the sale of 729 tickets. Let x = # of student tickets, and let y = # of adult tickets.

19) Gym Supreme charges \$33 per month, plus a one-time membership fee of \$50. Excellence Gym charges \$30 per month, plus a one-time membership fee of \$70. Let x = # of months, and y = total cost.

For #20 – 21: Set up a system to model each situation. Then solve your system to answer the question(s).

20) Jessica is looking for a nice place to order flowers for her party. Square Root Flowers charges a set-up fee of \$40 and \$10 per bouquet of flowers. Beautiful Flowers charges \$80 for a set-up fee and \$5 per bouquet of flowers. How many bouquets would need to be ordered to cost the SAME price at either shop? And how much does it cost?

21) Sammy took his family to the airport on Wednesday. It was \$200 per ticket and \$4 to park per day. He paid a total of \$608. Bobby took his family to the airport on Friday and it was \$250 per ticket and \$3 to park per day. Bobby spent a total of \$756. If they both bought the same amount of tickets and parked the same amount of time, how many tickets did they buy, and for how many days did they park?