**Math 7 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**KECK Packet May 2015**

Ms. Dowson

Complete the following work on packet and be sure to box your answers.

*Simplify:*

1.  2.  3. 

*Solve the following.*

4. $\frac{1}{4}x+2=\frac{3}{4}$ 5. $8-\frac{w}{10}=\frac{3}{5}$

6. $\frac{2}{3}\left(a-3\right)=\frac{1}{3}$ 7. $\frac{2x}{10}-4=2-\frac{2x}{5}$

8.  9. 

10.  11. 

12.  13. 

14.  15. 

16.  17. 

18. 

*Solve the inequality and graph on a number line:*

19.  20. 

21.  22. 

23*.* 

*Simplify the following*

24. $\frac{9}{5}-\frac{5}{18}$ 25. $\frac{1}{16}+\frac{5}{24}$

26. Simplify: 

27. Simplify: 

28. Daniel wants to leave a 20% tip on his restaurant bill of $45.00. How much money should Daniel leave for a tip?

29. A swimsuit is on sale for a 30% discount. If the swimsuit normally sells for $49.99, what is the discounted price?

30. (-2, 4), (0, 5), (2, 4), (3, 5), (-2, 1), (1, 4)

 a) What is the domain of the set of ordered pairs?

 b) What is the range of the set of ordered pairs?

c) Does the set of ordered pairs represent a function?

30. Make an x-y chart and find four solutions of .

31. Graph  using any method you like.

 

32. Find the x-intercept and the y-intercept of  and graph the line.

 a) x-intercept: b) y-intercept: c) graph:



33. Find the slope of the line that passes through the points (5, -1) and (3, -1).



34. Find the slope of the line that passes through the points (2, 3) and (7, -4).

35. Find the slope of the line of the graph below.



36. State the slope and the y-intercept of the graph of . (*Hint: First, solve the equation for y.)*

a) slope: b) y-intercept:

37. Graph a line with slope of 3/2 and y-intercept of -1.



38. Graph the following equation using the slope and the y-intercept.



39. a) The slope of a horizontal line is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? (positive/ negative/ undefined/0)

 b) What is the slope of the line ? (positive/ negative/ undefined/0) Sketch it below: 

40. You are taking a Tae Kwon Do class that costs $15 per month. In addition, you need to purchase a uniform that costs $25.

a) Write an equation in slope-intercept form that shows the amount of money *y* that you spend on the class and uniform together after *x* months.

b) How much have you spent on the class after 4 months?

41. Use the table that shows the average hourly wage of U.S. construction workers from 1980 to 1999.



a)



b) Write the equation of your best-fit line.

c) Use the best-fit line to predict the average hourly wage of workers in 2010.

|  |  |
| --- | --- |
| x | y |
| -4 | 0 |
| -3 | 2 |
| -2 | 1 |
| -1 | 1 |
| 1 | 4 |
| 2 | 4 |

42. a) Make a scatter plot of the data.

y

x

-

 b) Use a ruler to draw a line of

best fit.

 c) What are two points that lie on

your line of best fit?

 d) Use these two points to write an equation for your line of best fit.

e) Use your line to predict the y value when x = 5.