Solve the equations.

1.) $x-4=-10$

1._____

2.) $-\dfrac{m}{5}=13$

2. _____

3.) $-15=3(-z+6)$

3. _____

4.) $3.1+9.2y=-29.1$

4. _____

5.) $\dfrac{1}{2y}-8=7$

5. _____

6.) $\dfrac{3b-3}{6}=-1$

6. _____

7.) Janaya has 4 more oranges than Elijah. Elijah has 7 less oranges than Dan. Dan has 13.5 oranges.

  a.) Write an equation to represent the number of oranges Elijah has compared to Janaya.

  b.) Write an equation to represent the number of oranges Elijah has complared to Dan.

  c.) How many oranges to Elijah and Janaya have?

8.) $\dfrac{3}{4}x - \dfrac{2}{3}x = x - 8$ 8. _____

9.) **Solve the equation.**   9. _____

$$5 - \dfrac{1}{2}|x+3| = 9$$

10.) **Solve the equation.**   10. _____

$$-4 + \dfrac{5}{6}\left|\dfrac{5}{3}x + 4\right| = \dfrac{2}{3}$$

11.) **Solve the equation.** 11. _____

$$\frac{a}{15}=\frac{4}{3}$$

12.) **Solve the equation.** 12. _____

$$\frac{5-x}{2}=\frac{-0.5\,x-1}{3}$$

13.) 7 is what percent of 14? 13. _____

14.) What number is 37% of 90 ? 14. _____

15.) A concert ticket goes on sale for $75 on Friday morning. By Friday night, the price of the ticket increased to $122. Find the percent of increase.

16.)

CCSS CRITIQUE Determine whether each solution is correct. If the solution is not correct, describe the error and give the correct solution.

a.
$$2(g + 5) = 22$$
$$2g + 5 = 22$$
$$2g + 5 - 5 = 22$$
$$2g = 17$$
$$g = 8.5$$

b.
$$5d = 2d - 18$$
$$5d - 2d = 2d - 18 - 2d$$
$$3d = -18$$
$$d = -6$$

c.
$$-6z + 13 = 7z$$
$$-6z + 13 - 6z = 7z - 6z$$
$$13 = z$$

17.) Find the value of k to complete the equation.

$$k(3x-2)=4-6x$$

18.) Find the value of k to complete the equation.

$$15y-10+k=2(ky-1)-y$$

19.)

SHORT RESPONSE Maddie works at Game
Exchange. They are having a sale as shown.

Item	Price	Special
video games	$20	Buy 2 get 1 Free
DVDs	$15	Buy 1 get 1 Free

Her employee discount is 15%. If sales tax is
7.25%, how much does she spend for a total of
4 video games?

20.) During class, Mr. Eisenhart spoke about the importance of homework. Describe the role of
homework as it relates to your success now and in future classes.

Bonus #1: If Mr. Eisenhart is 43 years old, write an equation that shows the difference in years
between his year of graduation from Deering High School and your own graduation year.

Bonus #2: Look at the words to the Deering High School fight song. Write a ratio comparing the number of times the word "Deering" appears to the total number of words in the song.