Name: _____ Period: _____ Date: _____

Term 3 Final Practice Test

Term 3

Simplify the expressions:

1. $8-(18-2)-1\div 8$

2. $5-6\bullet 6-(7+5)$

3. $9-\left|12-16\right|\div 4$

4. $\dfrac{9\bullet 2\div 6+1}{8-10}$

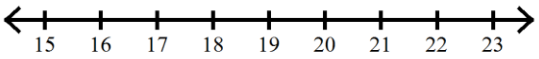
Solve each equation for the given variable:

5. $-8=p-13$

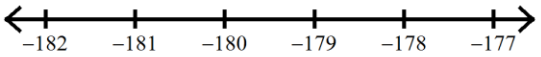
6. $416=-22a$

Solve and graph each inequality:

7. $32<r+14$



8. $-10\le \dfrac{n}{18}$



Solve the following:

9. $2\frac{2}{5}\bullet\frac{7}{6}$

10. $\frac{1}{3}\div\frac{3}{4}$

11. $\frac{4}{9}+\frac{1}{6}$

12. $\frac{2}{3}-\frac{1}{4}$

Solve each equation for the given variable:

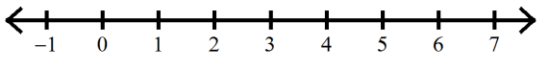
13. $0.4x + 3.9 = 5.78$

14. $9 + \frac{m}{3} = 2$

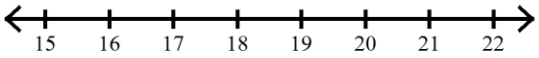
15. $-9 = 4n - 9$

Solve and graph each inequality:

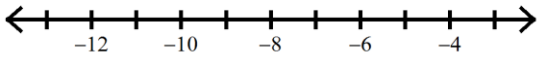
16. $0 \leq -1 + \frac{x}{4}$



17. $-3r - 4 \geq -64$



18. $-90 > 2(6n + 3)$



19. **Use the following dataset:**

8, 9, 12, 8, 7, 15, 13, 12, 11, 8, 13

Mean = _____

Median = _____

Mode = _____

Range = _____

Minimum = _____

Maximum = _____

1st Quartile = _____

3rd Quartile = _____

20. Use the following dataset:

20, 39, 31, 37, 32, 33, 34, 32

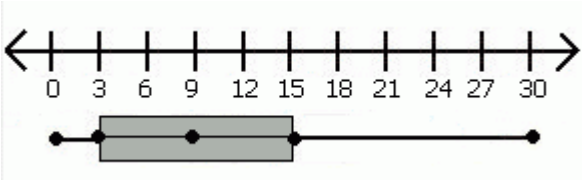
Mean = _____ **Minimum = _____**

Median = _____ **Maximum = _____**

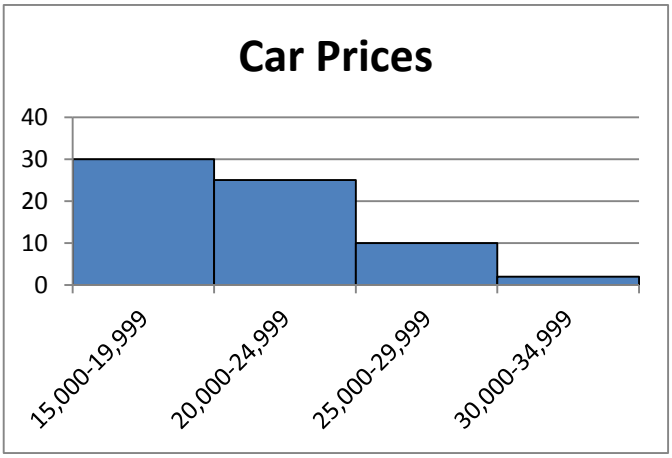
Mode = _____ **1st Quartile = _____**

Range = _____ **3rd Quartile = _____**

21. Given the following Box-and-Whisker Plot, what percent of the data is below 15?



22. Given the following histogram, how many cars are priced between $25,000 and $29,999?



23. Write the RATIO 12 : 28 as a simplified fraction.

24. $\frac{8}{11} = \frac{9.3}{m}$

Find the unit rates of the following:

25. Todd can bake 120 cookies in 3 hours.

26. Ashley can drive 70 miles in 45 minutes.

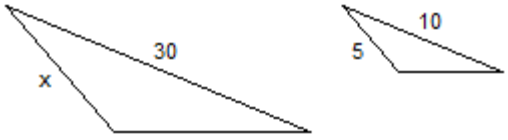
Use proportions to convert between units:

27. 32 fl oz = _____ pt

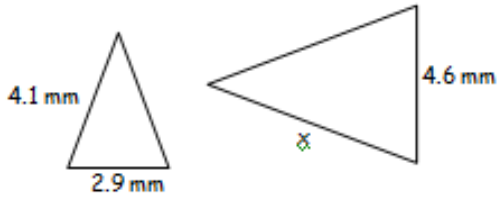
28. 8 lbs = _____ oz

Use proportions to solve for the missing side:

29.



30.



31. A drawing has a scale of 5 cm : 3 m to the actual figure. Find the drawing measurement if the length of the actual figure is 1.08 meters.

32. The scale of a map is 3 inches : 100 miles. Two cities are 7.5 inches apart on the map. Find the actual distance between the cities.

33. A photo is 10 inches tall. Find the height of the resulting photo if the photo is enlarged by a scale factor of 4.

34. Find the total possible combinations when you can choose one of each thing: 8 pairs of shoes, 2 pairs of sunglasses, 7 pairs of pants, 10 hats and 9 scarves.

You roll a standard die. Find the following:

35. P(a number greater than 4) =

36. P(3) =

37. P(even) =

38. P(not 2) =

A jar contains 7 green, 19 black, and 13 pink marbles. A marble is drawn at random. Find the following:

39. P(black) =

40. P(not pink) =

A dresser drawer contains one 3 blue, 4 orange, 7 white, and 10 black pairs of socks. You pull out one pair of socks put it back in and then pull out another pair of socks. Find the following:

41. P(black, black) =

42. P(orange, blue) =

A gumball machine contains 21 purple, 9 red, 16 yellow, 10 blue, and 8 green gumballs. You buy one gumball and eat it. You buy a second gumball and put it in your pocket.

43. P(yellow, red) =

44. P(green, green) =

45. 35 is 20% of what number?

46. What percent of 75 is 23?

47. At Chile's your bill comes to $32.15. You want to leave a tip of 18%. What will your total cost be?

48. A new bike is $200. If the tax rate is 6.5%, what is the total cost of the bike?

49. An Xbox that normally sells for $300 is on sale for $285. What is the percent of discount for the Xbox?

50. Find the percent of change and tell whether it is a percent increase or a percent decrease.

Original: 45
New: 87