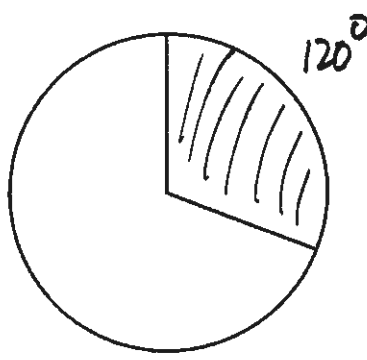
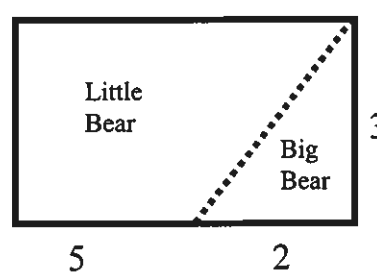


2nd Trimester Test

Data & Probability

Name KEY Period _____

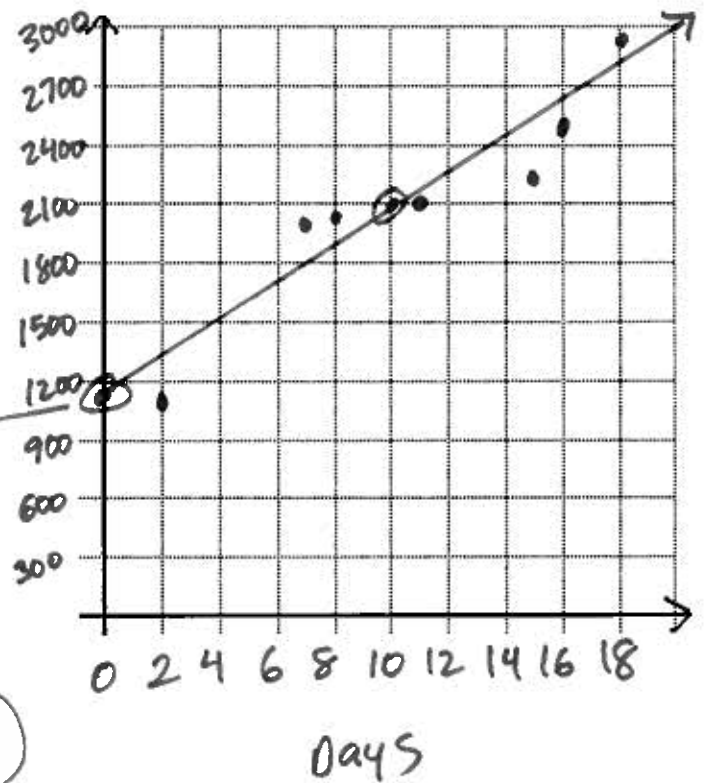
You reach your hand into a bag of beans to pick one: 8 are red, 37 black, and 15 white.

<p>1) What is the probability of picking black bean?</p> $\frac{37}{60} = .62$	<p>2) What is the probability of picking a white or red bean?</p> $\frac{23}{60} = .38$	<p>3) What is the probability of NOT picking a white bean?</p> $\frac{45}{60} = .75$
<p>4) A circle is 360°. What is the ratio of the shaded area to the whole circle?</p> $\frac{120}{360} = \frac{1}{3} = .33$ 	<p>5) Below is a diagram of a carnival game. You pay your money and you flip a token into the area. What are the chances that you'll get the Big Bear?</p>  $\frac{(.5)(2)(3)}{21} = .14$	

6) Take the data and plot the points on the graph. Determine a line of best fit and write the equation by calculating the slope and identifying the y-intercept.

Cost of Trip	
Days	Dollars
2	1100
7	2000
8	2050
11	2100
15	2200
16	2500
18	2900

(65)



$b = 1100$

$\frac{1000}{10} = 100$

$y = 100x + 1100$

$(0, 1100)$
 $(10, 2100)$

1. Find the mean, median and mode from the following data.

4 10 12 19 13 17 12 14 18 23 21 20 12 22

Mean 15.5

Median 15.5

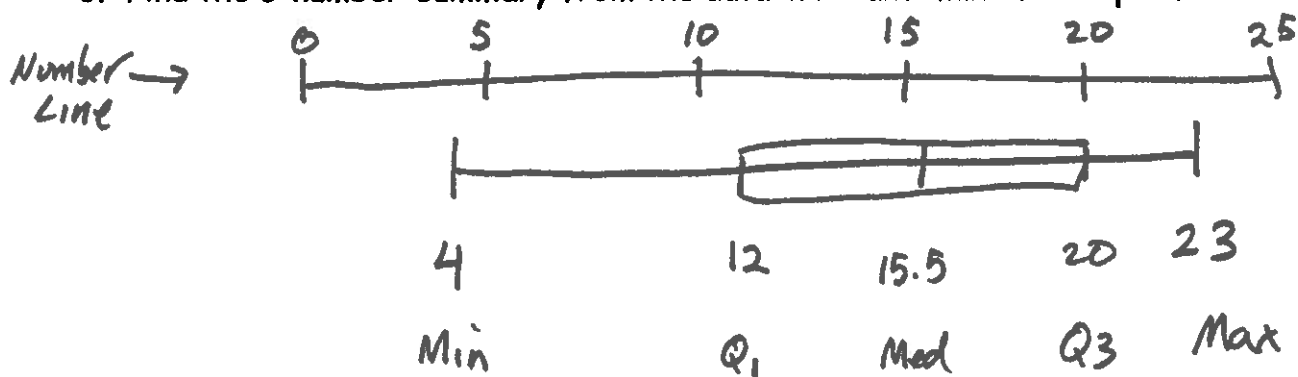
Mode 12

4 10 12 12 12 13 14 17 18 19 20 21 22 23

2. Are there any outliers in the data above? If so, what are they or what is it? Why?

4, because it is far away from the other numbers

3. Find the 5 number summary from the data in #1 and make a box plot.



4. Explain what each number in the 5 number summary means in complete sentences.

Min → The smallest # in data range.

Q_1 → The median of between the Min and Median.

Med → The middle number in data set.

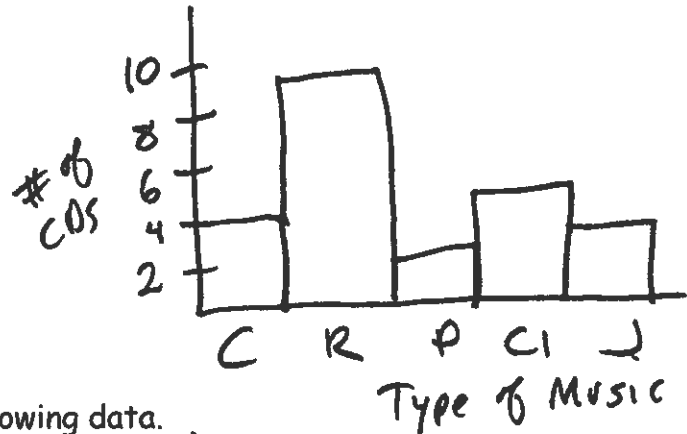
Q_3 → The median between the Max + median.

Max → The largest # in data range

* The box represents 50% of the data.

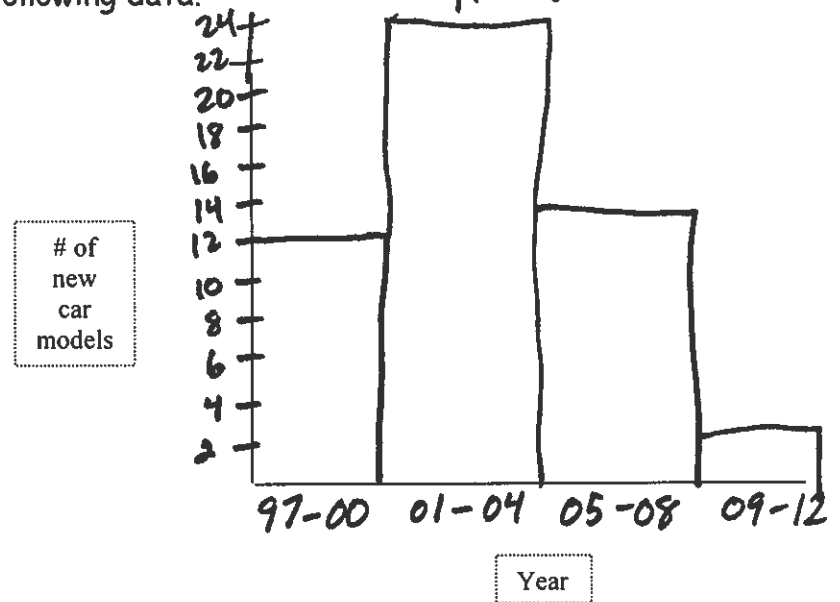
5. Construct a bar graph from the following chart

Music	# of CDs bought
Country	4
Rock	9
Punk	2
Classical	5
Jazz	3



6. Construct a histogram from the following data.

# of new car models	Date
4	1997
3	1998
5	1999
7	2001
8	2002
9	2003
8	2005
4	2006
2	2008
2	2009



7. Construct a stem & leaf plot from the following data.

16 11 23 26 18 11
 44 34 18 53 10 1
 18 27 39 34 3 2 58

