

7th Grade Year in Review 6

Name: _____

You have been working hard all year! Time to investigate! Show your work for each question and circle your answer. This is due by Friday, May 13th (10 points)

1. Probability(Refer to ch 13.1 for help)

What is the probability of randomly picking a black marble? Write the probability in a fraction, decimal and percent.



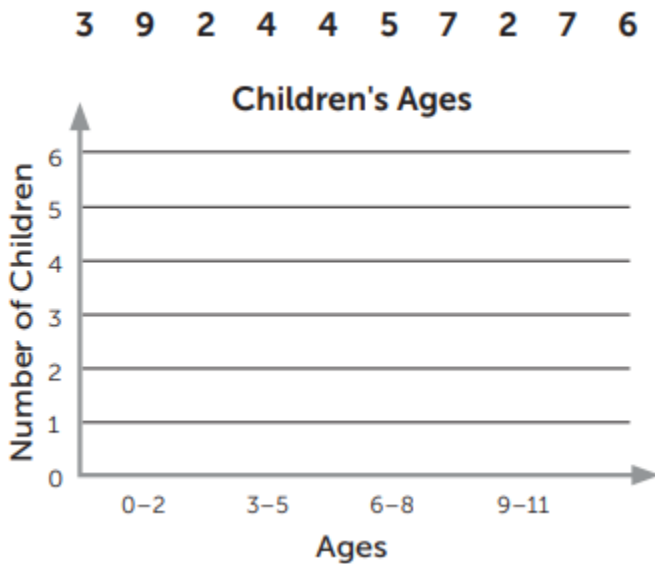
2. The Counting Principle (Refer to Ch 13.3 for help)

You have 35 snickers and 12 Twix bars. How many outcomes are possible if you randomly choose 1 snicker and 1 Twix bar?

3. Histograms. (Refer to ch 3.5 for help)

Complete the histogram.

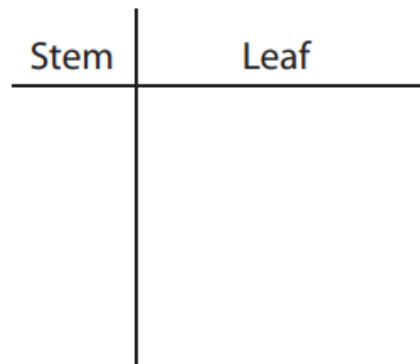
Jane recorded the age of the children she babysat. Record this on the below chart.



4. Stem and leaf plots. (refer to ch 3.3 for help)

Make a stem and leaf plot for the given data.

26, 37, 48, 33, 49, 26, 19, 26, 48



Key: 3|7 = _____

5. Evaluate the expression when $x = 11$

$$\sqrt{2x + 23 + 5x}$$

6. Solve $7a^2 = 343$

7. Solve $-6 \geq x - 9$. Then graph the solution.



8. What is the area of a trapezoid with a base of 10 in. a base of 8 in. and a height of 6 in.?

9. Solve the proportion.

$$\frac{5}{4} = \frac{a}{20}$$

10. Find the slope of the line and tell whether it is negative, positive or zero

