

Algebra 2B

Practice Quiz on 11-3 & 11-6

Name: _____

Date: _____ Hr: _____

SHOW ALL WORK

For #1-2, tell whether the outcomes of each trial are dependent events or independent events.

1. A month is selected at random; a number from 1 to 30 is selected at random.

1. _____

2. A letter of the alphabet is selected at random; one of the remaining letters is selected at random.

2. _____

3. Q and R are independent events. Find $P(Q \text{ and } R)$ when $P(Q) = \frac{1}{4}$ and $P(R) = \frac{2}{3}$.

3. _____

4. Suppose you have five books in your book bag. Three are novels, one is a biography, and one is a poetry book. Today you grab one book out of your bag without looking and return it later. Tomorrow you do the same thing. What is the probability that you grab a novel both days?

4. _____

For #5-6, you roll a standard number cube. Are the events mutually exclusive? Explain.

5. Rolling an even number and rolling a prime number.

5. _____

6. Rolling an even number and rolling a number less than 2.

6. _____

7. S and T are mutually exclusive events. Find $P(S \text{ or } T)$ if $P(S) = 12\%$ and $P(T) = 27\%$.

7. _____

For #8-10, a standard number cube is tossed. Find each probability.

8. $P(4 \text{ or even})$

8. _____

9. $P(\text{odd or greater than } 2)$

9. _____

10. $P(4 \text{ or less than } 6)$

10. _____

11. The frequency table shows the number of trees in the yard of each house on one street. What are the a.) mean, b.) median, c.) mode, and d.) range for the trees per yard?

11. a.) _____

b.) _____

c.) _____

d.) _____

Trees	3	4	5	6	7	8
Yards	1	5	7	4	1	2

12. What is the outlier for this data set: 16, 19, 21, 18, 18, 54, 20, 22, 23, 17.

12. _____

13. Make a box-and-whisker plot for the following set of values: 20, 23, 25, 36, 37, 38, 39, 50, 52, 55. Then identify a.) Q_1 , b.) Q_2 , c.) Q_3 and determine d.) the interquartile range.

13. a.) _____

b.) _____

c.) _____

d.) _____

14. Find the values at the a.) 30th and b.) 90th percentiles for the following data: 7, 12, 3, 14, 17, 20, 5, 3, 17, 4, 13, 2, 15, 9, 15, 18, 16, 9, 1, 6.

14. a.) _____

b.) _____