

Quiz 8 Retake Practice

Date _____ Period _____

Represent the sample space using set notation.

- 1) An ice cream stand offers single-scoop waffle-cones or bowls. Four flavors are available: strawberry, chocolate, vanilla, and mint chocolate chip.
- 2) A pizza stand offers both hand-tossed and pan pizza. Each pizza can either be a white pizza with no sauce or a red pizza with sauce.
- 3) A jewelry store sells gold and platinum rings. Each ring is fitted with a ruby, sapphire, emerald, or diamond gemstone.
- 4) A jewelry store sells gold and platinum rings. Each ring is fitted with a ruby, sapphire, or emerald gemstone.

Find the number of possible outcomes in the sample space.

- 5) A bag contains one red marble, one green marble, and one blue marble. You randomly pick a marble to play with. Then your friend picks a marble.
- 6) A spinner can land on either red, blue, green, yellow, purple, or orange. You flip a coin and then spin the spinner.
- 7) A soccer player takes two penalty kicks in a game. Each attempt results in a goal or a miss.
- 8) A pizza stand offers hand-tossed, pan, and thin-crust pizza. Each pizza can either be a white pizza with no sauce or a red pizza with sauce.

Determine whether the scenario involves independent or dependent events.

- 9) You flip a coin twice. The first flip lands heads-up and the second flip also lands heads-up.
- 10) A box of chocolates contains five milk chocolates and eight dark chocolates. You randomly pick a chocolate and eat it. Then you randomly pick another piece. The first piece is milk chocolate and the second piece is dark chocolate.

11) A basket contains seven apples and six peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. The first piece of fruit is an apple and the second piece is a peach.

12) There are seven nickels and five dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.

Find the probability.

13) You flip a coin and then roll a fair six-sided die. The coin lands tails-up and the die shows an odd number.

14) You roll a fair six-sided die twice. The first roll shows a six and the second roll shows a one.

15) You select a card from a standard shuffled deck of 52 cards. You return the card, shuffle, and then select another card. Both times the card is a diamond. (Note that 13 of the 52 cards are diamonds.)

16) A cooler contains twelve bottles of sports drink: five lemon-lime flavored, four orange flavored, and three fruit-punch flavored. You randomly grab a bottle. Then you return the bottle to the cooler, mix up the bottles, and randomly select another bottle. Both times you get a lemon-lime drink.

Determine if events A and B are independent.

17) $P(A) = \frac{2}{5}$ $P(B) = \frac{1}{5}$ $P(A \text{ and } B) = \frac{2}{25}$

18) $P(A) = \frac{9}{20}$ $P(B) = \frac{1}{4}$ $P(A \text{ and } B) = \frac{9}{80}$

19) $P(A) = \frac{3}{10}$ $P(B) = \frac{1}{4}$ $P(A \text{ and } B) = \frac{3}{25}$

20) $P(A) = \frac{13}{20}$ $P(B) = \frac{13}{20}$ $P(A \text{ and } B) = \frac{91}{200}$

Find the median, lower quartile, upper quartile, and range for each data set.

21)

Basketball Tournament Champions

School	Times Won	School	Times Won	School	Times Won	School	Times Won
Arizona	1	UTEP	1	Loyola-Chicago	1	Oklahoma State	2
Georgetown	1	California	1	NY City College	1	San Francisco	2
Utah	1	Oregon	1	Michigan State	2	Louisville	3
Maryland	1	Holy Cross	1	Cincinnati	2	Indiana	5
UNLV	1						

22)

Basketball Tournament Champions

School	Times Won	School	Times Won	School	Times Won	School	Times Won
Villanova	1	UNLV	1	Holy Cross	1	San Francisco	2
Ohio State	1	UTEP	1	Michigan State	2	Duke	5
Maryland	1	California	1	Cincinnati	2	Indiana	5
Michigan	1	La Salle	1	Oklahoma State	2		

23)

Words in Book Titles

2 2 2 2 2 2 3 3
3 3 3 3 4 4 4 4

24)

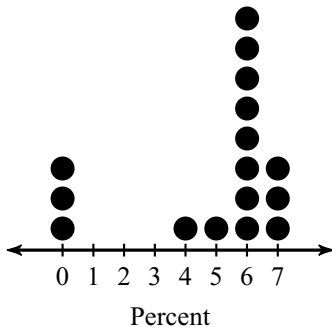
Words in Book Titles

1 2 2 2 2 2 3 3
3 3 3 3 5 5 6 6

Find the mode and mean for each data set.

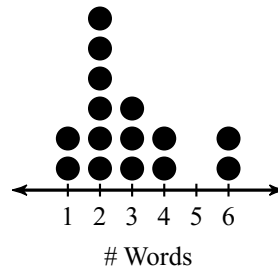
25)

Sales Tax by State

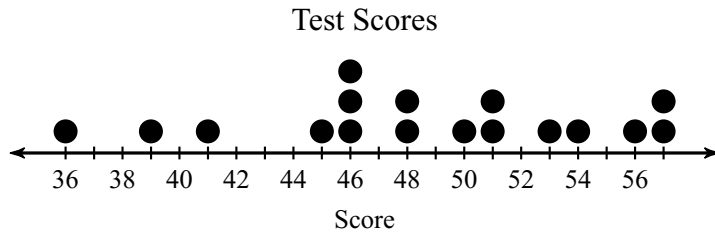


26)

Length of Book Titles



27)



28)

Average Lifespan

Animal	Years	Animal	Years	Animal	Years	Animal	Years
Fence Lizard	4	Koala	8	Woodchuck	15	Sulphur Crested Cockatoo	40
Opossum	4	Dog, large	10	Parakeet	18	Macaw	50
Muskrat	6	American Toad	15	Porcupine	20	Catfish	60
Guinea Pig	8	Rainbow Lorikeet	15	Cobra	28	Great Horned Owl	68

Bonus: Write the formula for mean and identify the parts.

29)