Steck-Vaughn Adult Education

Aztec Paxen Publishing

Math

Level D

Sampler

A Tutor™ for CASAS GOALS 2 Workbook

- Companion workbook to *A Tutor™ for CASAS GOALS 2 Student Edition*
- Additional practice items aligned to CASAS GOALS 2 and CCRS

Aztec Paxen Publishing

Math

A Tutor™ for CASAS GOALS 2 Workbook

Level D

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About CASAS Math GOALS 2

The CASAS Math GOALS 2 tests measure basic adult math skills and the ability to make calculations and solve word problems that relate to real-world situations and traditional academic contexts. The CASAS Math GOALS 2 tests include multiple-choice items with four answer options. Basic calculators are allowed. Formulas are provided.

The CASAS Math GOALS 2 tests align with the CASAS Competencies and the Adult Education College and Career Readiness (AE-CCR) Mathematics Standards.

CASAS Math GOALS 2 Level D Blueprint

Level D Content Areas	Percentage of Coverage	CCR Standard Code
Number Sense and Operations	25%	NS
Algebraic Thinking	25%	EE, F
Geometry	25%	G
Statistics and Probability	25%	SP

AE-CCR Mathematics Standard Code Key

NS	The Number System
EE	Expressions and Equations
F	Functions
G	Geometry
SP	Statistics and Probability

Using *A Tutor™ for CASAS Math GOALS 2 Workbook*

A Tutor™ for CASAS Math GOALS 2 Level D: Workbook is designed to be used hand-in-hand with *A Tutor™ for CASAS Math GOALS 2 Level D: Student Edition*. The student edition includes instruction and practice for the Adult Education College and Career Readiness standards assessed on the CASAS Math GOALS 2 test.

Practice Sets

A Tutor™ for CASAS Math GOALS 2 Level D: Workbook includes practice sets for each lesson in *A Tutor™ for CASAS Math GOALS 2 Level D: Student Edition*. Each practice set provides additional items similar to those found on the CASAS Math GOALS 2 Level D test.

- Use the practice sets after completing the corresponding student edition lesson if you feel you need additional practice.
- Use the practice sets after completing the unit reviews in the student edition for areas that need review and improvement.

Unit Reviews

A Tutor™ for CASAS GOALS 2 Workbook unit reviews allow you to check your understanding of the skills presented in each unit. Use the corresponding Unit Review Analysis Charts on pages 191–201 to identify strengths and weaknesses. These charts will help you determine if you need to go back to any of the lessons in the student edition before continuing.

Answers and Explanations

A Tutor™ for CASAS Math GOALS 2 Workbook includes explanations for the correct answers to all practice items. After completing a practice set or unit review, check your answers on pages 138–189. For each item answered incorrectly, read the provided explanation to help you rework the item to obtain the correct answer.

Please remember, there may be more than one way to solve a math problem. The explanations show one method of solving a problem. You may have used a different method than the one provided to correctly answer the question.

Test-Taking Tips

- Read the directions very carefully. Read through them word for word.
- Read each question carefully. Make sure you know what it means and what you have to do.
- Read all of the answer options carefully, even if you think you know the answer.
- Answer all of the questions. If you cannot find the right answer, rule out the answers that you know are wrong. Then try to figure out the right answer. If you still do not know, make your best guess.
- If you cannot figure out the answer on the paper-and-pencil test, put a light mark by the question number on the answer sheet and come back to it later. Erase your marks before you finish. If you cannot figure out the answer on the online test, flag the item for review.
- Do not change an answer unless you are sure your first answer is wrong. Usually, your first idea is the correct answer.
- If you get nervous, stop for a while. Take a few breaths and relax. Then start working again.

Unit 1 Number Sense and Operations: Rational Numbers

Practice 1 Understand Negative Values

6.NS.5

1 Quintin deposits $120 into his bank account on Monday and another $90 into his bank account on Friday. Which integer represents Quintin's deposit on Friday?

A. 120 B. 90

C. −120 D. −90

2 Margo withdrew $100 from her bank account last week. This week, she withdraws $1,000. Which integer represents her withdrawal last week?

A. 100 B. −1,000

C. 1,100 D. −100

3 Jerod and Mike flew from Maine to Arizona for a camping trip. In Maine, the temperature was 80 degrees Fahrenheit. The temperature when they arrived in Arizona was 105 degrees Fahrenheit. Which integer represents the temperature when they arrived?

A. 80 B. −80

C. 105 D. −105

4 Jamaal is 4 blocks west (to the right) of the bus stop. Wendy is 5 blocks east (to the left) of the bus stop. Which statement is *true*?

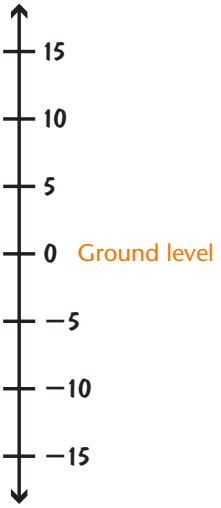
A. Jamaal's distance from the bus stop is −4 blocks. Wendy's distance from the bus stop is −5 blocks.

B. Jamaal's distance from the bus stop is 4 blocks. Wendy's distance from the bus stop is 5 blocks.

C. Jamaal's distance from the bus stop is 4 blocks. Wendy's distance from the bus stop is −5 blocks.

D. Jamaal's distance from the bus stop is −4 blocks. Wendy's distance from the bus stop is 5 blocks.

Use the number line to answer questions 5 through 7.



5 Raul works in a building that has eight floors above ground level. His office is on the third floor. What integer represents where the top floor is located?

A. −3 B. 8

C. 3 D. −8

6 Frasier was in his apartment 12 floors above sea level. He needed to go down to the storage room which is 3 floors below ground level. Which integer represents the location of the storage room?

A. 12 B. 3

C. −9 D. −3

7 The legal office is 8 floors above ground level. Shiloh is coming from the parking deck located 3 floors below ground level. Which integer represents the location of the legal office?

A. −8 B. 11

C. 8 D. −3

8 Which table shows the correct integers representing each situation?

A.

Situation	Integer
a deposit of $45 into a bank account	45
45 feet below sea level	45
an increase of $30 in the price	30
the football team lost 30 yards	−30

B.

Situation	Integer
a deposit of $45 into a bank account	45
45 feet below sea level	−45
an increase of $30 in the price	−30
the football team lost 30 yards	30

C.

Situation	Integer
a deposit of $45 into a bank account	45
45 feet below sea level	−45
an increase of $30 in the price	30
the football team lost 30 yards	−30

D.

Situation	Integer
a deposit of $45 into a bank account	−45
45 feet below sea level	45
an increase of $30 in the price	30
the football team lost 30 yards	−30

9 The temperature where Dave lives was 9 degrees Celsius below zero yesterday. The current temperature is 3 degrees Celsius below zero. Which integer represents the current temperature where Dave lives?

A. −3 B. −9

C. 3 D. 9

10 In the morning, a thermometer shows a temperature of 70 degrees Fahrenheit. In the afternoon, a thermometer shows a temperature of 83 degrees Fahrenheit. What integer represents the temperature in the afternoon?

A. 70 B. −70

C. 83 D. −83

11 Which table shows the correct integers representing each situation?

A.

Situation	Integer
the price of apples is discounted $1	−1
the restaurant is 3 floors above the lobby	3
the stock market gained 1 point	1
the football team lost 3 yards	3

B.

Situation	Integer
the price of apples is discounted $1	−1
the restaurant is 3 floors above the lobby	3
the stock market gained 1 point	1
the football team lost 3 yards	−3

C.

Situation	Integer
the price of apples is discounted $1	1
the restaurant is 3 floors above the lobby	−3
the stock market gained 1 point	1
the football team lost 3 yards	−3

D.

Situation	Integer
the price of apples is discounted $1	1
the restaurant is 3 floors above the lobby	3
the stock market gained 1 point	−1
the football team lost 3 yards	−3

12 A flying fish is swimming at 5 feet below sea level. Then, it jumps from the water into the air reaching a height of 2 feet. What integer represents the flying fish's height in the air?

A. 2 B. 5

C. −2 D. −5

13 Levi hiked 5 miles to a picnic area that is located 25 feet above sea level. Which integer represents the location of picnic area?

A. 15 B. 20

C. 25 D. 30

Practice 15 Equivalent Ratios

6.RP.3, 6.RP.3.a

Use the information and table to answer questions 1 and 2.

A group of friends build patterns using a ratio of circles to squares. The table shows the patterns:

Friend	Circles	Squares
Ally	9	21
Barb	12	32
Carla	6	14
Darcy	18	42

1 Which friend uses a ratio different from the others?

A. Ally **B.** Barb

C. Carla **D.** Darcy

2 Barb continues her pattern while maintaining the same ratio of circles to squares. If her pattern now includes 27 circles, how many squares are in the pattern?

A. 64 squares **B.** 72 squares

C. 80 squares **D.** 88 squares

---

3 What is the value of y?

$$\frac{4}{9} = \frac{y}{63}$$

A. $y = 8$ **B.** $y = 7$

C. $y = 28$ **D.** $y = 36$

4 A veterinarian puts dogs on a diet and exercise plan. She bases the length of the walk on the weight of the dog. She determines that she needs to walk 15 yards for every pound the dog weighs. How far should the dog be walked if he is a three-pound dog?

A. 9 yards **B.** 15 yards

C. 35 yards **D.** 45 yards

Use the information and table to answer questions 5 and 6.

A teacher's aide tracks the speed at which a group of fifth graders reads. The table shows the number of pages read and the amount of time in minutes:

Student	Number of Pages Read	Time (minutes)
Jill	50	25
Fred	50	20
Steve	54	18

5 Which of the following lists the students in order from *fastest* to *slowest*?

A. Fred, Steve, Jill

B. Jill, Fred, Steve

C. Steve, Fred, Jill

D. Fred, Jill, Steve

6 If Fred continues to read at the same speed, how many minutes would it take Fred to read 250 pages?

A. 60 minutes

B. 80 minutes

C. 100 minutes

D. 120 minutes

---

7 In the previous season, a soccer team played 20 games. They had the same number of goals each game, for a total of 180 goals for the season. How many goals did they score each game?

A. 7 goals

B. 9 goals

C. 12 goals

D. 36 goals

8 Glenda makes smoothies with a ratio of six mango chunks to every twelve raspberries. Which ratio is equivalent to the ratio of raspberries to mango?

A. 15:3

B. 60:30

C. 18:6

D. 36:16

9 What is the value of x?

$$\frac{2}{5} = \frac{14}{x}$$

A. $x = 10$

B. $x = 70$

C. $x = 35$

D. $x = 25$

10 A dermatologist sees ten patients with psoriasis for every two patients with warts. Which ratio is equivalent to the ratio of patients with psoriasis to warts?

A. 5:1

B. 25:10

C. 20:10

D. 18:9

Use the information and table to answer questions 11 and 12.

Margie mixes sugar with butter. The table shows the relationship between the butter in cups and the sugar in cups for her recipe.

Butter (cups)	Sugar (cups)
1	1.5
6	y
7	10.5

11 What is the value of y?

A. $y = 6.5$

B. $y = 9$

C. $y = 13$

D. $y = 14.25$

12 Given the ratio stays consistent, how many cups of butter would be needed for a recipe that required 15 cups of sugar?

A. 7 cups of butter

B. 8 cups of butter

C. 9 cups of butter

D. 10 cups of butter

13 On a 50-question test, Frank gets 44 correct answers. Which ratio is the equivalent to the ratio of correct answers to total questions?

A. 16:34

B. 4:5

C. 18:20

D. 22:25

14 A basketball coach determines that he needs 5 basketballs for every 3 players that are on his team. Which ratio is *not* equivalent to the basketball-to-player ratio?

A. 20:12

B. 30:18

C. 15:9

D. 24:16

15 What is the value of x?

$$\frac{9}{15} = \frac{54}{x}$$

A. $x = 75$

B. $x = 80$

C. $x = 85$

D. $x = 90$

Practice 24 Adding and Subtracting Linear Expressions

7.EE.1

1 What is the simplified form of $(-12x + 4) - (-2x + 6.8)$?

A. $-10x - 2.8$
B. $-5.2x + 6$
C. $-14x + 10.8$
D. $-18.8 + 8$

2 What is the simplified form of $(8x - 15) + (4x - 3)$?

A. $5x - 11$
B. $4x - 12$
C. $-7x + 1$
D. $12x - 18$

3 What is the simplified form of $\left(-4\frac{3}{5}x + 13\right) - \left(20 - \frac{1}{5}x\right)$?

A. $-4\frac{4}{5}x + 33$
B. $-4\frac{4}{5}x - 7$
C. $-4\frac{2}{5}x - 7$
D. $-4\frac{2}{5}x + 33$

4 What is the simplified form of $(7.9 + 4x) + (6.1x + 7)$?

A. $10.1x + 14.9$
B. $11.1x + 13.1$
C. $14x + 11$
D. $-2.1x + 0.9$

5 What is the simplified form of $(-9 - 24x) - (12x + 31)$?

A. $-33x + 44$
B. $-12x + 22$
C. $-21x - 55$
D. $-36x - 40$

6 What is the simplified form of $(12x + 51) + (25 - 7x)$?

A. $27x + 44$
B. $5x + 76$
C. $19x + 26$
D. $63x + 18$

7 What is the simplified form of $(-3x + 17) + (74 - 9x)$?

A. $14x + 65$
B. $71x + 8$
C. $-12x + 91$
D. $6x - 57$

8 What is the simplified form of $\left(\frac{7}{9} + 24x\right) - \left(-9x + \frac{8}{9}\right)$?

A. $-4x - 32$
B. $-17x - 19$
C. $15x + 13$
D. $33x - \frac{1}{9}$

9 Peyton can use the expression $15x + 28$ to model the amount of money, in dollars, that he has in his bank account after x months. His brother Ryan can use the expression $7x + 15$ to model the amount in his bank account. Which expression models the total amount in both Peyton's and Ryan's accounts?

A. $22x + 43$
B. $8x + 13$
C. $30x + 35$
D. $21x + 30$

10 A glassblower can use the expression $15 + 5x$ to model the number of vases he plans to have produced after x weeks. He can use the expression $3 + 3x$ to model the number he expects to have sold. Which expression models the number of vases he expects to have remaining after x weeks?

A. $18x + 7$
B. $8x + 18$
C. $2x + 12$
D. $20x + 6$

11 What is the simplified form of the expression?

$(7x - 9.3) - (-4x + 13.1)$

A. $3x + 4.8$

B. $11x + 4.8$

C. $3x - 22.4$

D. $11x - 22.4$

12 What is the simplified form of the expression?

$(16.4x + 13.8) - (9.9x - 18.6)$

A. $-6.5x + 31.4$

B. $5.5x + 31.4$

C. $-6.5x + 32.4$

D. $6.5x + 32.4$

13 What is the simplified form of the expression?

$(21.3 + 17.8x) - (-7.5x - 15.6)$

A. $25.3x + 36.9$

B. $-25.3x - 36.9$

C. $-10.3x + 5.7$

D. $10.3x + 5.7$

14 What is the simplified form of the expression?

$(12.5 - 12.2x) - (5.9x + 25.3)$

A. $6.3x - 12.8$

B. $-18.1x - 12.8$

C. $-18.1x + 12.8$

D. $6.3x + 12.8$

15 What is the simplified form of the expression?

$(-29.4 - 13.7x) - (-19.2 + 5.2x)$

A. $18.9x - 10.2$

B. $18.9x + 10.2$

C. $-18.9x - 10.2$

D. $-18.9x + 10.2$

16 What is the simplified form of the expression?

$(-12.9 - 14.8x) + (-7.6 + 8.1x)$

A. $-6.7x - 20.5$

B. $6.7x + 20.5$

C. $-6.7x + 20.5$

D. $6.7x - 20.5$

17 Samuel models the number of action figures he collects after x weeks with the expression $5x + 23$. His friend Abraham uses the expression $9x + 13$ to represent his collection. What expression represents the total number of action figures collected by both Samuel and Abraham combined?

A. $14x - 36$ **B.** $14x + 36$

C. $-14x + 10$ **D.** $14x - 10$

18 Bailey models the amount of money she has collected for donations after x weeks with the expression $34x + 67$. Her friend Kiara uses the expression $26x + 89$ to represent her collection. What expression represents the total amount of money collected by both Bailey and Kiara combined?

A. $-60x + 156$ **B.** $60x - 156$

C. $-60x - 156$ **D.** $60x + 156$

19 What is the simplified form of the expression?

$\left(\frac{3}{5} - \frac{2}{11}x\right) + \left(-\frac{7}{5} + \frac{8}{11}x\right)$

A. $\frac{6}{11}x - \frac{4}{5}$

B. $\frac{10}{11}x - \frac{4}{5}$

C. $\frac{10}{11}x + \frac{4}{5}$

D. $\frac{6}{11}x - 1$

20 What is the simplified form of the expression?

$\left(-\frac{7}{13}x + \frac{5}{9}\right) - \left(-\frac{2}{9} + \frac{3}{13}x\right)$

A. $\frac{10}{13}x - \frac{7}{9}$

B. $-\frac{4}{13}x + \frac{7}{9}$

C. $-\frac{10}{13}x + \frac{7}{9}$

D. $\frac{4}{13}x + \frac{8}{9}$

Practice 38 Converting Measurements

6.RP.3.d

1 Lauren has a mass of 135 pounds. What is her approximate mass in kilograms? (1 kilogram ≈ 2.2 pounds)

A. 61.4 kg

B. 70.45 kg

C. 90.85 kg

D. 269.5 kg

2 The Pharaoh's tomb has a volume of 3,750 cubic feet. What is the approximate volume of the container in cubic meters? (1 cubic meter ≈ 35.31 cubic feet)

A. 202.13 m^3

B. 106.20 m^3

C. 95.45 m^3

D. 79.30 m^3

3 A tanker pump can hold six gallons. About how many liters does the tanker pump hold? (1 liter ≈ 0.26 gallon)

A. 12.26 L

B. 13.01 L

C. 18.5 L

D. 23.08 L

4 Noah rides his bicycle at 17 miles per hour. What is Isaac's approximate speed in kilometers per hour? (1 kilometer ≈ 0.621 mile)

A. 27.38 km per hr

B. 24.15 km per hr

C. 21.54 km per hr

D. 15.42 km per hr

5 The average person throws away 5.5 pounds of plastic per day. About how many grams of plastic does the average person throw away? (1 pound ≈ 454 grams)

A. 163 g

B. 275 g

C. 1,998 g

D. 2,497 g

6 Fabio spends nine hours per week playing video games. How many seconds does Fabio spend playing video games per week? (1 hour = 60 minutes; 1 minute = 60 seconds)

A. 32,400 sec

B. 29,700 sec

C. 23,600 sec

D. 18,600 sec

7 A leap day, February 29th, occurs every four years. How many days are there between one leap day and the next? (1 year = 365 days)

A. 1,635 d

B. 1,460 d

C. 1,330 d

D. 1,165 d

8 Which measurement is equivalent to seven weeks? (1 year = 365 days; 1 week = 7 days; 1 day = 24 hours; 1 hour = 60 minutes; 1 minute = 60 seconds)

A. 0.42 yr

B. 50,400 sec

C. 1,176 hr

D. 16,800 min

9 An elephant has a mass of six tons. What is the approximate mass of the Indian elephant in kilograms? (1 ton ≈ 907 kilograms)

A. 5,442 kg

B. 6,349 kg

C. 7,128 kg

D. 8,634 kg

10 The Great Wall of China is 8,851 kilometers long. What is the approximate length of the wall in miles? (1 kilometer ≈ 0.621 mile)

A. 15,011 mi

B. 14,510 mi

C. 5,496 mi

D. 3,959 mi

11 James is designing a fish tank for an exhibit at a local aquarium. The tank will hold 1,391 cubic meters. What is the approximate volume of the container in cubic feet? (Use 1 cubic meter ≈ 35.31 cubic feet)

A. 48,686.93 ft^3

B. 49,116.21 ft^3

C. 49,931.82 ft^3

D. 50,435.21 ft^3

12 Stewart works at a zoo and feeds the giraffes 72,942 grams of food. About how many pounds of food does he feed them? (1 pound ≈ 454 grams)

A. 161.93 lb

B. 159.71 lb

C. 162.37 lb

D. 160.67 lb

13 Tracey is traveling in her car and goes a total of 117.91 kilometers. How far does she approximately travel in miles? (1 kilometer ≈ 0.621 mile)

A. 72.92 mi

B. 73.17 mi

C. 73.22 mi

D. 73.54 mi

14 Robin decided to run a marathon. The length of a full-size marathon is 26.2 miles. How many feet will she run? (1 mile = 5,280 feet)

A. 138,336 ft

B. 137,224 ft

C. 136,932 ft

D. 139,798 ft

15 Stella is filling up an inflatable pool for her children to play in. The package states that the pool can hold 435 gallons of water. How many liters of water can the pool hold? (1 liter ≈ 0.26 gallon)

A. 1,768.9 L

B. 1,376.4 L

C. 1,673.1 L

D. 1,789.2 L

16 Matt walks his dog during the week for a total of 23,640 seconds. How many total hours and minutes did he spend walking the dog? (1 hour = 60 minutes; 1 minute = 60 seconds)

A. 7 hr and 14 min

B. 6 hr and 44 min

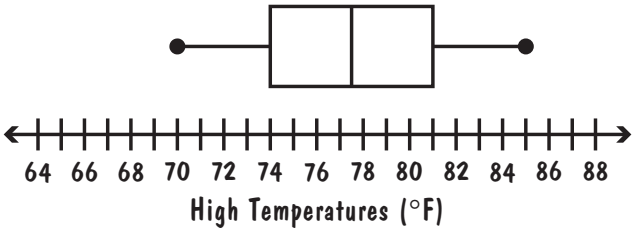
C. 7 hr and 24 min

D. 6 hr and 34 min

Practice 51 The Shape of Data

6.SP.5.d

1 The graph describes the distribution of the daily high temperatures in a city over a 3-month period.



What is the *best* measure of variability for the data?

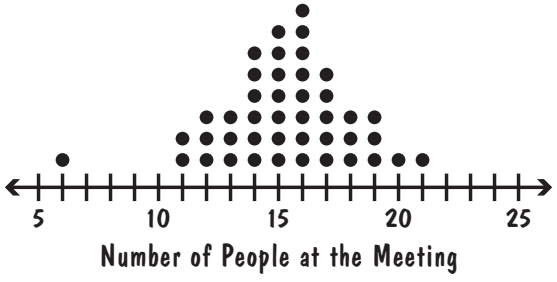
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

2 The graph shows the number of people who attended a gardening club each week. The club secretary usually records the number of people who attend at the start of the meeting, but one week the secretary forgot and recorded the number at the end, after many people had already left.



Which is the *better* measure of center for describing the number of people who attended the gardening club?

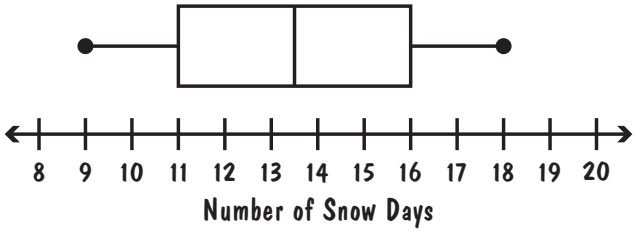
A. the mean of all the data

B. the mean for data between 11 and 21 only

C. the median of all the data

D. the median for data between 11 and 21 only

3 A news article uses the following graph to describe the distribution of the number of snow days in an area over a period of 20 years.



What is the *best* measure of center for the data?

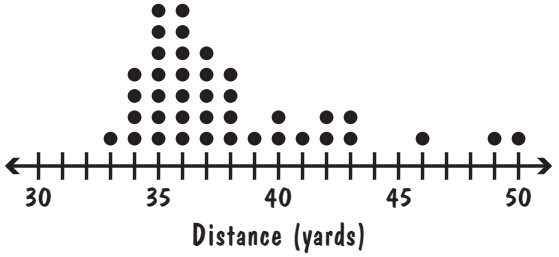
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

4 The graph shows the distribution of the distances students were able to kick a soccer ball in a competition.



What is the *best* measure of variability for the data?

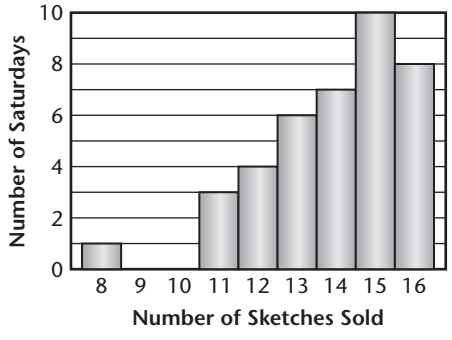
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

5 An artist sells caricature sketches at a kiosk in a mall each Saturday. The graph describes the distribution of the number of sketches the artist sells each Saturday.



What is the *best* measure of center for the data?

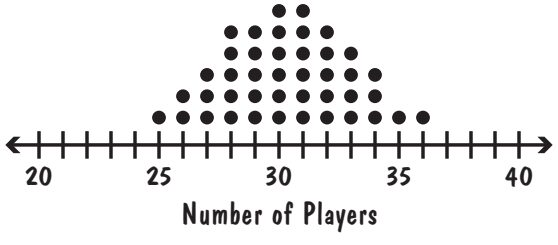
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

6 The graph shows the distribution of the number of players who participate in a bowling league each week.



What is the *best* measure of variability for the data?

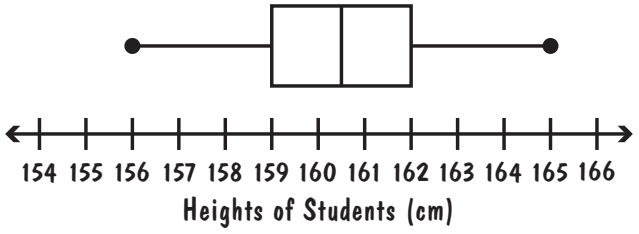
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

7 The graph represents the distribution of heights of students in a class.



What is the *best* measure of variability for the data?

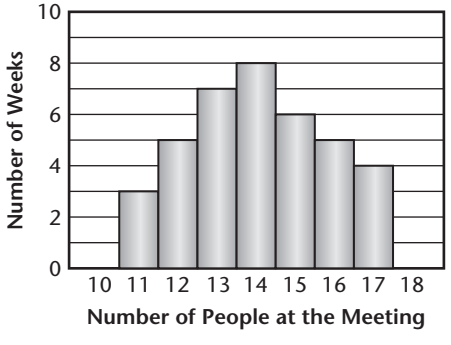
A. mean

B. median

C. interquartile range (IQR)

D. mean absolute deviation (MAD)

8 The graph describes the distribution of the number of people who attend a book club meeting at the library each week.



What is the *best* measure of center for the data?

A. mean

B. median

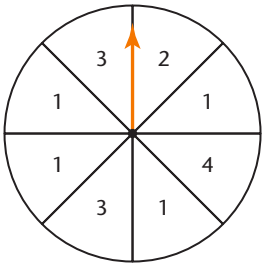
C. interquartile range (IQR)

D. mean absolute deviation (MAD)

Practice 58 Understand Probability

7.SP.5

1 Lilivati uses a spinner to help her do her meal planning for the week. If she spins a 1, she has chicken for dinner. If she spins a 3, she plans a vegetarian dinner. If she spins a 2, she prepares seafood for dinner. And if she spins a 4, she goes out to eat at a restaurant. Is the probability that she will eat dinner at a restaurant impossible, unlikely, likely, or certain?



A. impossible **B.** unlikely

C. likely **D.** certain

2 Nina tosses a coin into the air one time. Which statement *best* describes the probability that the coin will land on heads?

A. It is certain that the coin will land on heads.

B. It is likely that the coin will land on heads.

C. It is unlikely that the coin will land on heads.

D. There is an equal chance of the coin landing on heads or tails.

3 Rene is a player on a professional soccer team. She has a 0.8 probability of being selected as the team captain. Is the probability of Rene becoming team captain impossible, unlikely, likely, or certain?

A. impossible **B.** unlikely

C. likely **D.** certain

4 Henrik is driving to a store and comes to a fork in the road that provides three different routes. He is unsure of which route to take. Is the probability of Henrik choosing the correct way to the store impossible, unlikely, likely, or certain?

A. impossible **B.** unlikely

C. likely **D.** certain

5 Ama rolls a six-sided number cube. Is the probability of Ama rolling a number greater than 1 impossible, unlikely, likely, or certain?

A. impossible **B.** unlikely

C. likely **D.** certain

6 Zane is trying to decide which of three books to read. He decided he would read the one with the highest probability of being available. His librarian told him how many copies of each book was available out of the total number of copies.

- Book 1: There are 2 out of 9 copies available.
- Book 2: There is 1 out of 2 copies available.
- Book 3: There are 4 out of 5 copies available.

Which book should Zane choose?

A. Book 3

B. Book 2

C. Book 1

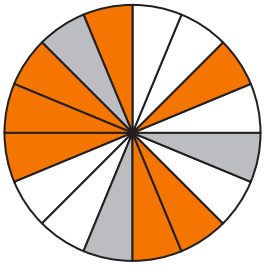
D. It is impossible to determine.

7 A roulette wheel has spaces that are either red or black. Is the probability that the ball will land on a blue space impossible, unlikely, likely, or certain?

A. impossible **B.** unlikely

C. likely **D.** certain

8 Brantly has an assortment of flavored teas. He creates a spinner to choose which flavor to brew for his afternoon tea time. If the spinner lands on orange, he'll make blueberry tea. If it lands on white, he'll make mango tea. If it lands on gray, he'll make cinnamon tea. Which type of tea is Brantly *most likely* to make?



A. blueberry

B. mango

C. cinnamon

D. Brantly is equally likely to make blueberry, mango, or cinnamon tea.

9 Raquel is going to the beach for a week. The newscaster says the probability of rain is 0.2 for the entire week. Which statement *best* describes the chances that it will rain while Raquel is at the beach?

A. It is impossible that it will rain while Raquel is at the beach.

B. It is unlikely that it will rain while Raquel is at the beach.

C. It is likely that it will rain while Raquel is at the beach.

D. It is certain that it will rain while Raquel is at the beach.

10 Jeff has worked for the same company for several years. His boss just told him he has a 75% chance of being promoted soon. Is the probability of Jeff being promoted impossible, unlikely, likely, or certain?

A. impossible

B. unlikely

C. likely

D. certain

11 Esteban tells his friends that he has a better chance of flipping a coin and having it land on tails than he does rolling a six-sided number cube and getting an even number. Which statement explains if Esteban is correct or incorrect?

A. Esteban is correct because there are only 2 possibilities for flipping a coin and there are 6 possibilities when a number cube is rolled.

B. Esteban is correct because it is more likely for a coin to land on tails than it is for a number cube to land on an even number.

C. Esteban is incorrect because the probability of a coin landing on tails is the same probability as rolling an even number on a number cube.

D. Esteban is incorrect because it is more likely to land on an even number on a number cube than to land on tails when flipping a coin.

12 Ryan is at the gym and wants to pick a partner for a basketball shooting contest. He observes Bobby, Clay, and Marcus practicing shots from the same spot on the court that will be used for the shooting contest

- Bobby: Makes 6 out of 9 shots.
- Clay: Makes 4 out of 5 shots.
- Marcus: Makes 4 out of 8 shots.

Based on their shooting performance, who would be the *best* partner for Ryan?

A. Bobby

B. Clay

C. Marcus

D. It is impossible to determine from the given information.