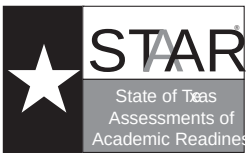
5
Mathematics

STAAR GRADE 5 MATHEMATICS REFERENCE MATERIALS



MATHEMATICS

DIRECTIONS

Read each question carefully. For a multiple-choice question, determine the best answer to the question from the four answer choices provided. For a griddable question, determine the best answer to the question. Then fill in the answer on your answer document.

1 Mr. Maclane drove 577.2 miles. Ms. Lopez drove 165.4 miles.

About how many more miles did Mr. Maclane drive than Ms. Lopez?

A 400 miles

B 300 miles

C 800 miles

D 700 miles

3 The table shows the weights in tons of four cars.

Weights of Cars

Car	Weight (tons)
Q	1.269
R	1.314
S	1.281
T	1.238

Which statement is true?

A The weight of Car S is less than the weight of Car T.

B The weight of Car Q is greater than the weight of Car R.

C The weight of Car W1 T-.9ss than the weight of Car TA

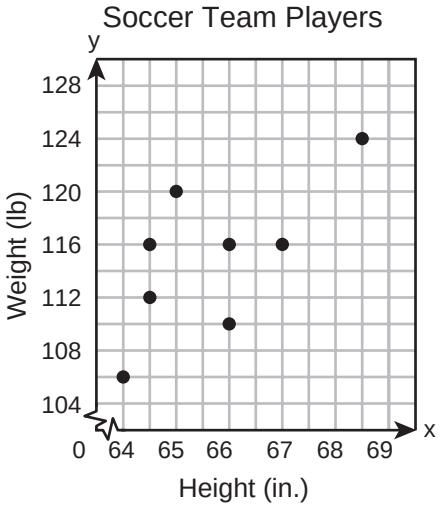
4 A youth soccer team has eight players. The table shows the height and the weight of each of the eight players.

Soccer Team Players

Height (in.)	64	66	64.5	68.5	67	66	65	64.5
Weight (lb)	105	115	112	124	116	110	120	115

Which scatterplot best represents the data in the table?

F



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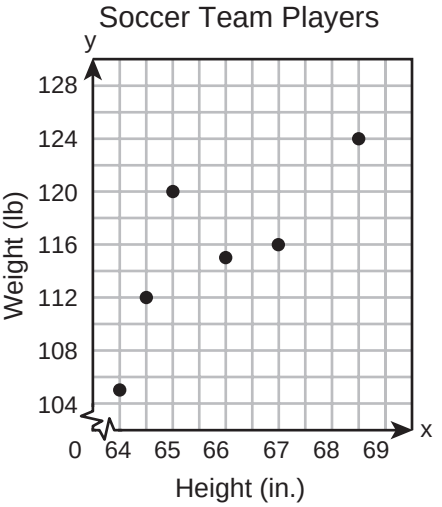

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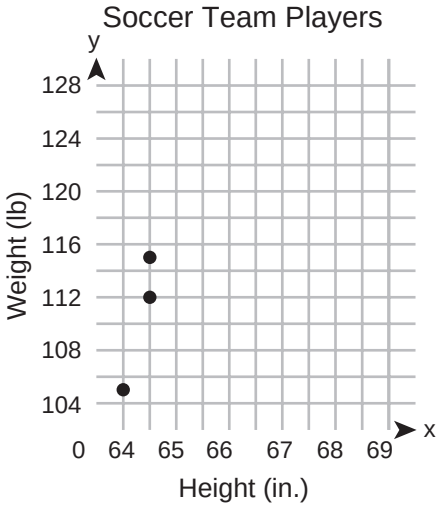
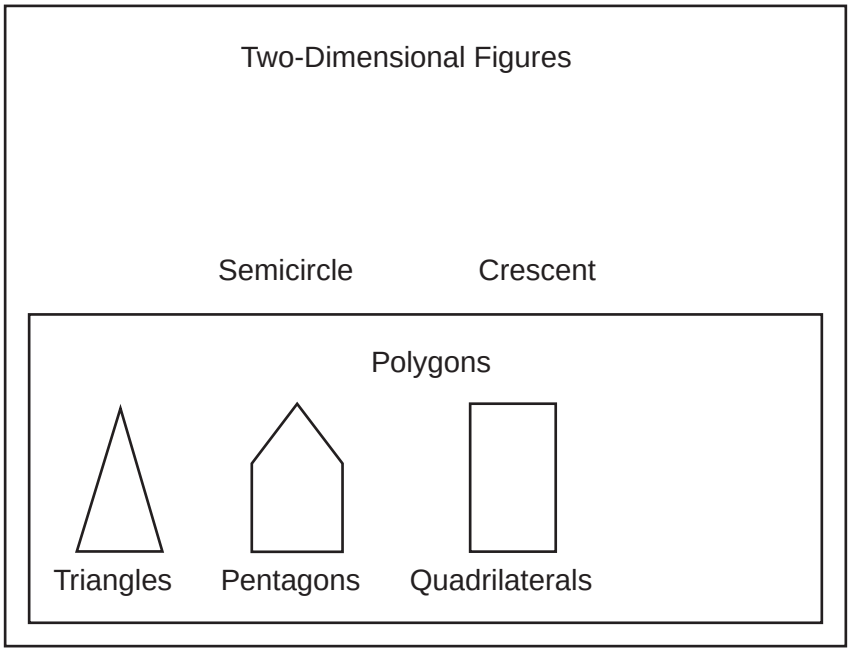


5 Which shape is NOT sorted correctly in the graphic organizer?



8 A baker had 48 cups of flour in a container. The baker used

$11\frac{1}{4}$ cups of flour on Friday and $14\frac{1}{2}$ cups of flour on Saturday.

How many cups of flour were left in the container?

F $22\frac{1}{4}$ cups

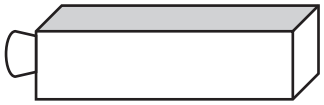
G $23\frac{3}{4}$ cups

H $25\frac{3}{4}$ cups

J $23\frac{1}{4}$ cups

9 Marisol used a number machine to create ordered pairs of numbers based on a rule. Some ordered pairs are shown.

1.5



10 A man bought 6 cans of tuna. Each can of tuna cost $0.93.

What is the total amount of money the man spent on the cans of tuna?

F $4.98

G $5.58

H $6.93

J $5.48

---

11 Which model represents $0.6 \div 2 = 0.30$?

A

12 Carmella plotted the ordered pair (1, 3) on a coordinate grid by moving 1 unit up and 3 units left from the origin. Which statement is true?

F Carmella plotted both the x-coordinate and the y-coordinate incorrectly.

G Carmella plotted the x-coordinate incorrectly and the y-coordinate correctly.

H Carmella plotted the x-coordinate correctly and the y-coordinate incorrectly.

J Carmella plotted both the x-coordinate and the y-coordinate correctly.

---

13 What is the value of this expression?

Mathematics

15 The frequency table shows the numbers of visitors in different age ranges who visited a children's museum on Saturday.

Children's Museum Visitors

Age (years)	Number of Visitors
0–4	𝍸 𝍸 𝍸
5–9	𝍸 𝍸 𝍸 𝍸 𝍸 III
10–14	𝍸 𝍸 𝍸 𝍸 I
15–19	𝍸 𝍸 I
20–24	𝍸 II
25–29	𝍸 𝍸
30–34	𝍸 𝍸 II
35–40	𝍸 𝍸 𝍸 𝍸 III

What is the difference between the number of visitors who were younger than 20 and the number of visitors who were 20 and older?

A 75

B 52

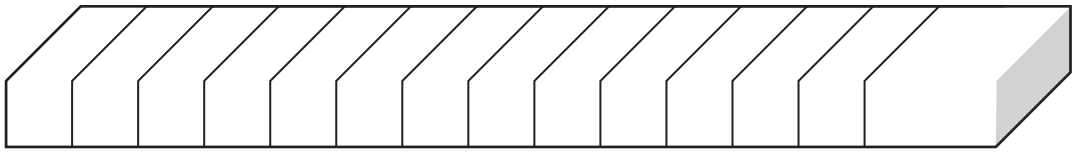
C 18

D 23

17 Elsa and a group of her friends always sit together at lunch. Every day students join them at the table where they sit. The table below shows the relationship between the number of students joining Elsa and her friends and the total number of students sitting at the table.

Day	Number of Students Joining	Total Number of Students at the Table

18 The figure shows the base layer of a rectangular prism that Sophie built using blocks.



19 The table shows the times that it took five students to complete a set of math problems.

Completion Times

Student	Time (min)
Mario	12.068
Rosa	11.450
Chris	12.495
Jessica	11.50
Nellie	12.085

If the times are ordered from least to greatest number of minutes, in what position would Nellie's time be?

A Second

B Third

C Fourth

D Fifth

---

20 Which answer choice best describes the x-coordinate in an ordered pair?

F The horizontal line composed of the set of points that all have a y-coordinate of 0

G The first number in an ordered pair that determines the movement left or right from the origin on a coordinate grid

H The second number in an ordered pair that determines the movement up or down from the origin on a coordinate grid

J The intersection of two lines on a coordinate grid

21 Tickets for a school event were sold for $18 each. A total of $4,554 was collected from these ticket sales.

How many tickets were sold for this event?

A 253

B 254

C 268

D 230

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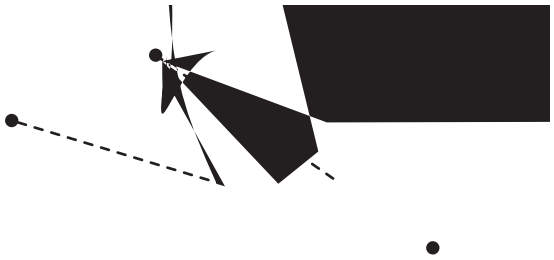
22 The diagram shows the locations of three cities and the triangle formed between these locations. The distances between the cities are shown in miles.



23 An expression is given.

$$3(25 + 19) + 4(3)$$

What is the value of this expression?

A 294

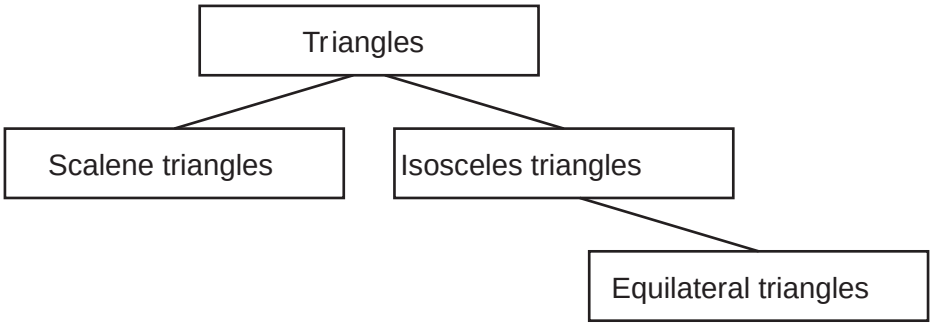
B 144

C 408

D 168

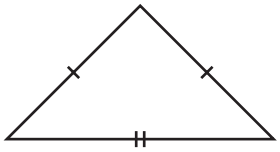
GO ON

24 The graphic organizer shown can be used to classify triangles.



Which triangle can be classified as scalene?

F



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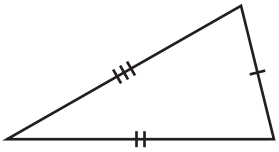

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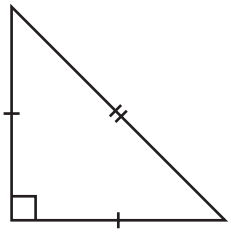

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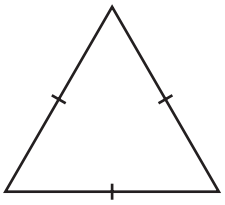

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25 A family used a total of 2.24 pounds of ground beef to make 8 equal-size hamburgers. How much ground beef in pounds was used for each hamburger?

A 0.33 lb

B 0.28 lb

C 0.3 lb

D 2.8 lb

26 Penelope earns $450 each month. Penelope made a list of her expenses for the month of May.

May Expenses

Expense	Amount
Cell phone	$50
Clothing	$100
Entertainment	$150
Food	$120
Savings	$50

Which change can Penelope make to balance her budget for the month of May?

F Increase her budgeted amount for savings by $20

G Decrease her budgeted amount for entertainment by $20

H Increase her budgeted amount for food by $10

J Decrease her budgeted amount for clothing by $10

29 Lee Ann bought 2 cartons of yogurt. She ate $\frac{1}{8}$ of a carton of yogurt each day.

How many days did it take Lee Ann to eat all of the yogurt in the 2 cartons?

A 10

B 16

C 4

D 6

---

30 The stem and leaf plot shows the number of laps around a track that several teams walked as part of a fund-raiser for the library. The teams that walked more than 50 laps raised an extra $100 for the library.

Laps Walked

Stem	Leaf
3	1 2 2 2 3
4	1 6
5	0 3
6	3 3 5

3|0 means 30.

What fraction of the teams raised this extra money?

F $\frac{1}{4}$

G $\frac{5}{12}$

H $\frac{5}{7}$

J $\frac{1}{3}$

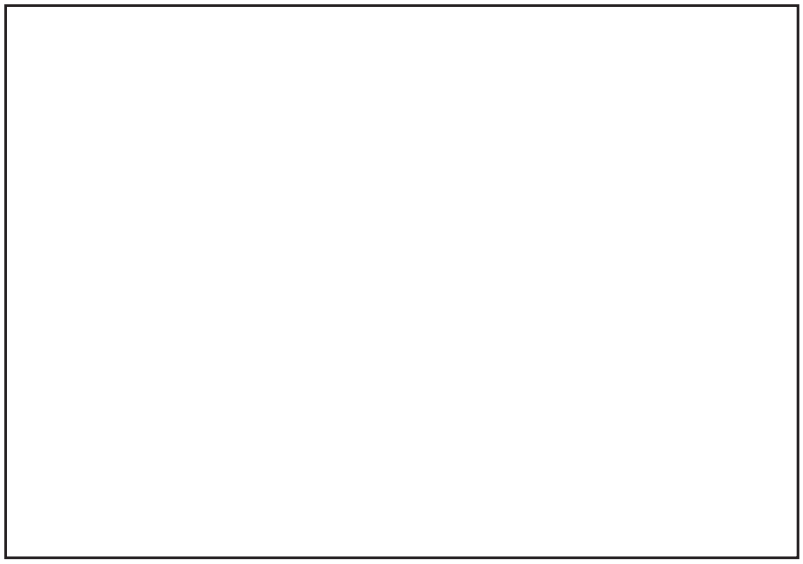
31

33 A business that rents cars is open for 8 hours on Monday. On <</MCID 6FormulaC 12 0 0 212
Monday morning the business had 45 cars.

- The business rented 3 car s to customers during each of the first 5 hours.
- The business rented 2 car s to customers during each of the next 3 hours.
- The total number of car s that were brought back to the business by customers on Monday was 17.

In which equation does c r

34 Mr. Warren drew a diagram of the base of a carton shaped like a rectangular prism. Use the ruler provided to measure the length and width of the diagram to the nearest inch.



Which measurement is closest to the area of the base of the carton in square inches?

F $A = 12$ square inches

G $A = 14$ square inches

H $A = 20$ square inches

J $A = 18$ square inches

35 Which operation should be performed first when simplifying this expression?

$$40 \div (5 + 3) \times 8 + 1$$

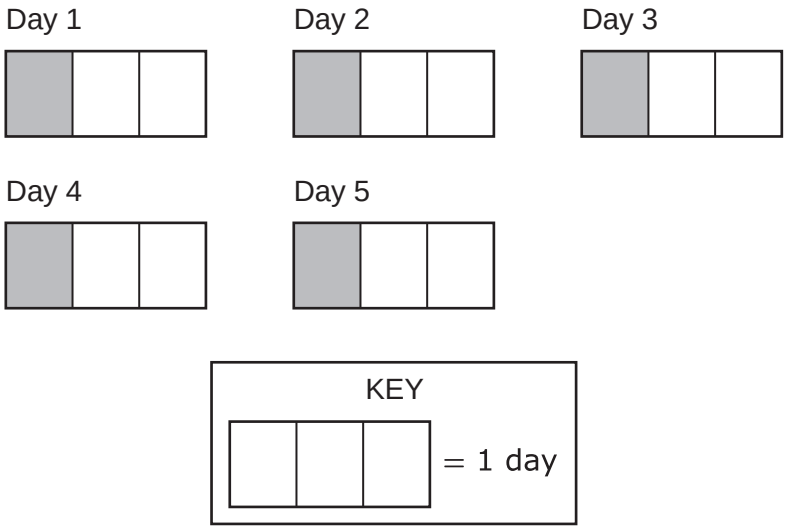
A $40 \div 5$, because it is the first operation when reading left to right

B $5 + 3$, because the operation in the parentheses should be performed first

C 3×8, because multiplication should be performed before addition

D $8 + 1$, because it is the first operation when reading right to left

36 Jacqueline works 5 days a week. She spends $\frac{1}{3}$ of each day at work. The model is shaded to represent the amount of time Jacqueline spends at work each week.



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