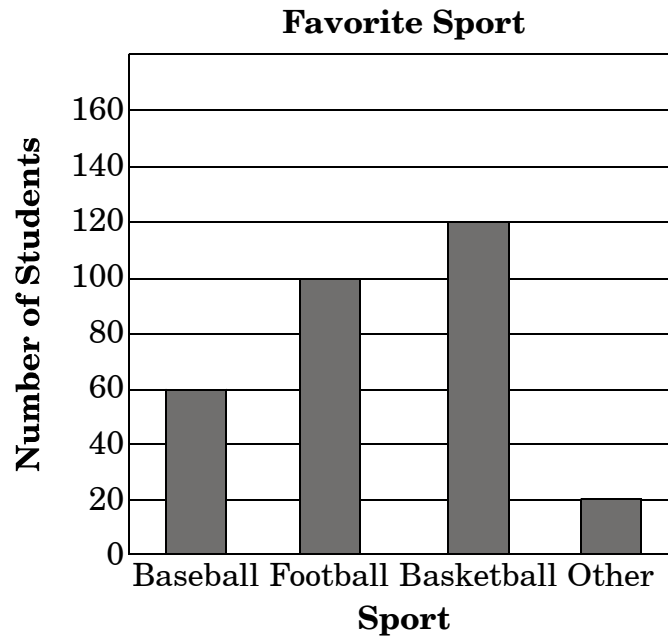


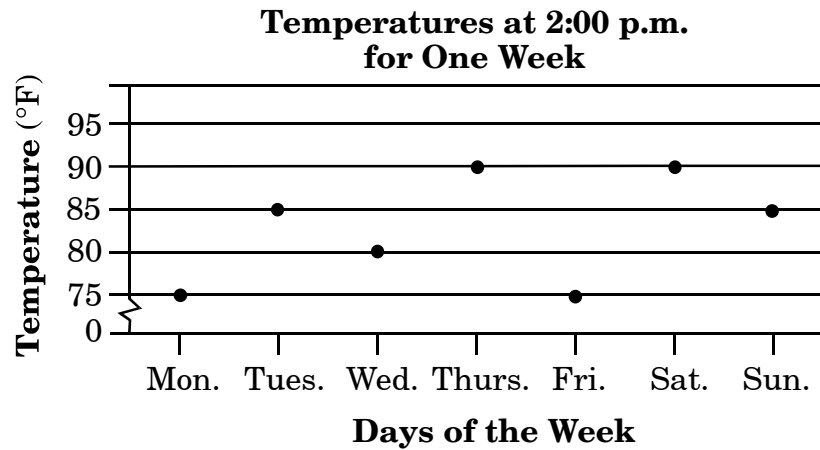
1. John surveyed the students at his school to determine their favorite sport. The results are shown in the following graph.



What percent of the students selected baseball?

- A 20%
- B 30%
- C 40%
- D 60%

2. This graph shows a city's 2 p.m. temperature readings for one week.

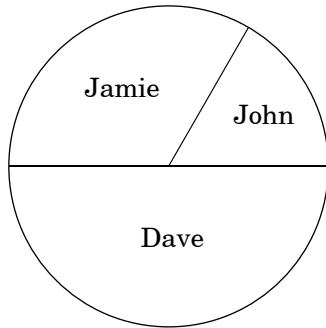


Between which two days was there the largest increase in temperature?

- A Wednesday and Thursday
- B Thursday and Friday
- C Friday and Saturday
- D Saturday and Sunday

3. The following are the results from the class election.

**Class President Results**



If 150 students voted, **about** how many votes did Jamie receive?

- A 25
- B 38
- C 50
- D 75

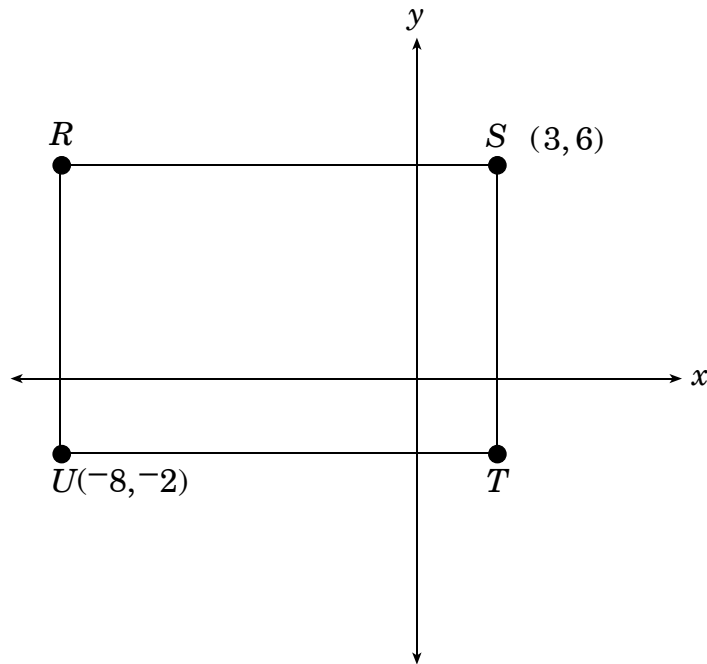
4. The Allen family needs to set aside \$3,000 for monthly expenses. The list below shows where the money is being spent.

Food	\$600
Housing	\$1,500
Electricity and Telephone	\$200
Clothes	\$200
Car repairs and Gas	\$300
Emergencies and Children's allowances	\$200

If a circle graph is constructed, **about** what fraction of the circle will represent food expenses?

- A  $\frac{1}{2}$
- B  $\frac{1}{3}$
- C  $\frac{1}{5}$
- D  $\frac{1}{10}$

5. If  $RSTU$  is a rectangle, what are the coordinates of point  $R$ ?



- A  $(-11, -8)$   
B  $(-8, 6)$   
C  $(-5, 4)$   
D  $(3, -2)$

6. Martha walked to her friend's house that is three blocks east of her home. Then she walked four blocks south. If Martha's home is graphed at the origin on a coordinate plane, which ordered pair would describe the point at the end of her walk?

- A  $(3, 4)$
- B  $(-3, 4)$
- C  $(-3, -4)$
- D  $(3, -4)$

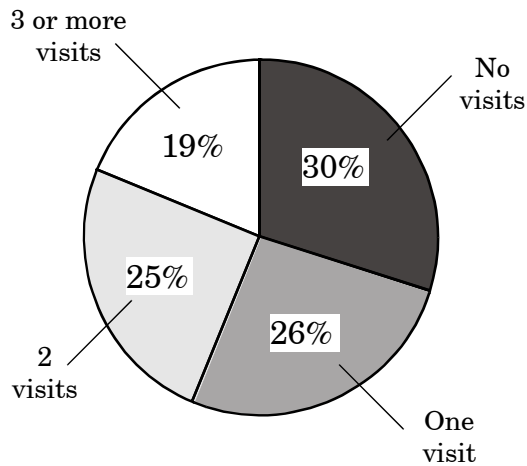
7. If the following coordinates are plotted and connected in order, what geometric shape do they make?

$(-2, 4), (4, 4), (-2, -4), (-5, 0), (-2, 4)$

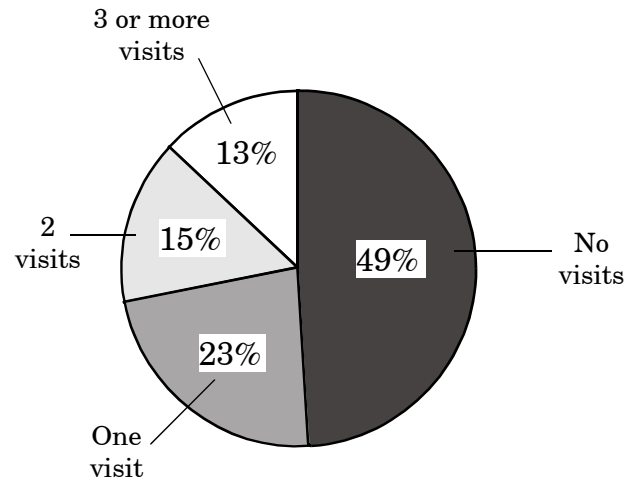
- A trapezoid
- B rhombus
- C rectangle
- D square

8. According to the circle graphs, which of the following is a true statement?

**Persons *with* dental insurance**



**Persons *without* dental insurance**



- A About the same percent of people with and without insurance do not visit the dentist.
- B About the same percent of people with and without insurance visit the dentist 3 or more times.
- C People with dental insurance make about twice as many visits to the dentist.
- D People without insurance are more likely to make fewer visits to the dentist.
- 
9. Kyle's math scores for the grading period are 95, 90, 70, 60, 85, 95, 100. Hong's math scores for the grading period are 80, 86, 95, 90, 95, 60, 100. Which of the following is different for the two students?
- A range
- B mean
- C median
- D mode

10. Shana and Mina are working together on a math project and will receive the same grade. Their grades up to now are listed below.

Shana's Math Grades	Mina's Math Grades
100	85
86	95
91	65
85	100
88	75

What grade could they receive that will keep Shana's average the same, but improve Mina's average by one point?

- A 83
- B 85
- C 87
- D 90
11. Two sets of data have the same mode and the same median but have different means. Which of the following sets of data meet these criteria?
- A Set 1: 72, 73, 85, 95, 95  
Set 2: 65, 75, 85, 85, 95
- B Set 1: 85, 85, 92, 95, 100  
Set 2: 85, 85, 90, 95, 100
- C Set 1: 80, 85, 90, 90, 95  
Set 2: 85, 87, 90, 90, 93
- D Set 1: 80, 80, 85, 90, 93  
Set 2: 80, 80, 85, 91, 92

12. Jason had these scores on six math quizzes: 79, 80, 85, 70, 100, and 75. Sean's scores on the first five quizzes were 80, 83, 75, 95, and 76. What score does Sean need on his sixth quiz to give him the same average as Jason?

- A 79
- B 80
- C 81
- D 82

13. Charles has two dimes, four nickels, and some quarters in his pocket. If the probability of drawing a quarter out of his pocket is  $\frac{1}{2}$ , how many quarters does he have?

- A 2
- B 4
- C 6
- D 8

14. Leaving her office, Amanda took the elevator up 5 floors to a meeting. She then went down 12 floors to the cafeteria. The cafeteria is located on the fourth floor. Where is Amanda's office located?
- A on the eleventh floor
  - B on the tenth floor
  - C on the fifth floor
  - D on the third floor
15. Eric, Ricardo, Kara, and Tamara were on the school newspaper staff and were in charge of four different committees—reporting, editorial, advertising, and production. Kara and Tamara were not in charge of the editorial or advertising staffs. Tamara was not in charge of the reporters. Ricardo was not in charge of the advertising staff. Who was in charge of the editorial staff?
- A Eric
  - B Ricardo
  - C Kara
  - D Tamara

### End of Goal 4 Sample Items

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## Answers to EOG Mathematics Grade 6 Sample Items

### Goal 4

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1. **Objective 4.01**  
Create and evaluate graphic representations of data.  
**Thinking Skill:** Integrating      **Correct Answer:** A
  
2. **Objective 4.01**  
Create and evaluate graphic representations of data.  
**Thinking Skill:** Analyzing      **Correct Answer:** C
  
3. **Objective 4.01**  
Create and evaluate graphic representations of data.  
**Thinking Skill:** Analyzing      **Correct Answer:** C
  
4. **Objective 4.01**  
Create and evaluate graphic representations of data.  
**Thinking Skill:** Applying      **Correct Answer:** C
  
5. **Objective 4.03**  
Locate points in all quadrants of the coordinate plane using ordered pairs.  
**Thinking Skill:** Analyzing      **Correct Answer:** B
  
6. **Objective 4.03**  
Locate points in all quadrants of the coordinate plane using ordered pairs.  
**Thinking Skill:** Applying      **Correct Answer:** D
  
7. **Objective 4.03**  
Locate points in all quadrants of the coordinate plane using ordered pairs.  
**Thinking Skill:** Generating      **Correct Answer:** A
  
8. **Objective 4.05**  
Construct convincing arguments based on analysis of data and interpretation of graphs.  
**Thinking Skill:** Analyzing      **Correct Answer:** D
  
9. **Objective 4.04**  
Use measures of central tendency to compare two sets of data.  
**Thinking Skill:** Generating      **Correct Answer:** B

## Answers to EOG Mathematics Grade 6 Sample Items

### Goal 4

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10. **Objective 4.04**  
Use measures of central tendency to compare two sets of data.  
**Thinking Skill:** Integrating      **Correct Answer:** D
11. **Objective 4.04**  
Use measures of central tendency to compare two sets of data.  
**Thinking Skill:** Generating      **Correct Answer:** C
12. **Objective 4.04**  
Use measures of central tendency to compare two sets of data.  
**Thinking Skill:** Applying      **Correct Answer:** B
13. **Objective 4.07**  
Make predictions based on the probabilities of simple events.  
**Thinking Skill:** Analyzing      **Correct Answer:** C
14. **Objective 4.08**  
Use inductive and deductive reasoning to solve problems.  
**Thinking Skill:** Analyzing      **Correct Answer:** A
15. **Objective 4.08**  
Use inductive and deductive reasoning to solve problems.  
**Thinking Skill:** Analyzing      **Correct Answer:** B