



**BROAD HORIZON**  
— T U I T I O N —

# **11+ Tuition**

**Year 4**

**Week 28**

**ANSWERS**

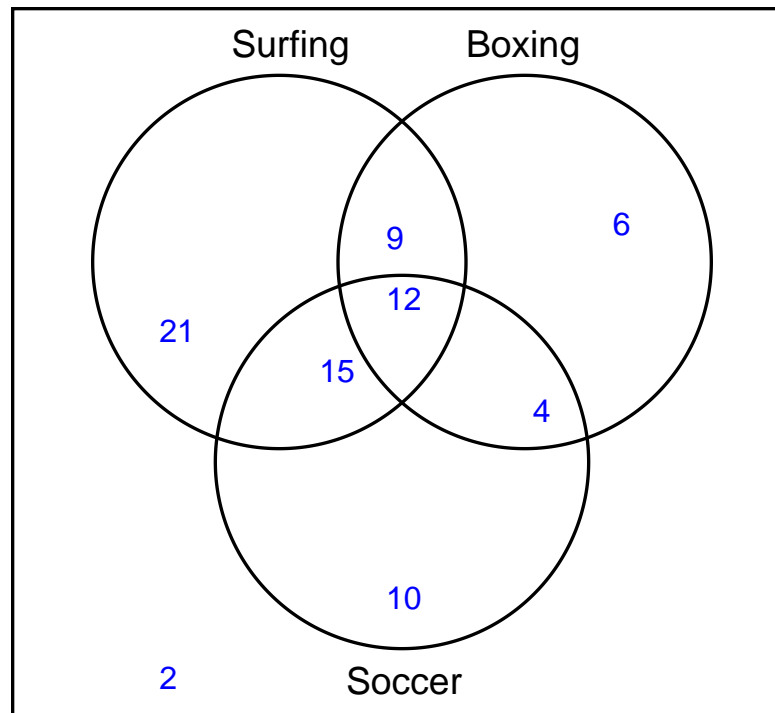
Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Answer the Questions Based on the Venn Diagram



- 1) How many students like both Boxing and Soccer but not Surfing ? 4
- 2) How many students like both Surfing and Soccer but not Boxing ? 15
- 3) How many students like both Surfing and Boxing ? 21
- 4) How many students like both Surfing and Soccer ? 27
- 5) How many students do not like either Surfing or Soccer ? 8
- 6) How many students do not like both Surfing and Soccer ? 52
- 7) How many students like Surfing or Soccer ? 71
- 8) How many students do not like either Boxing or Soccer ? 23
- 9) How many students like both Boxing and Soccer ? 16
- 10) How many students do not like either Surfing or Boxing ? 12

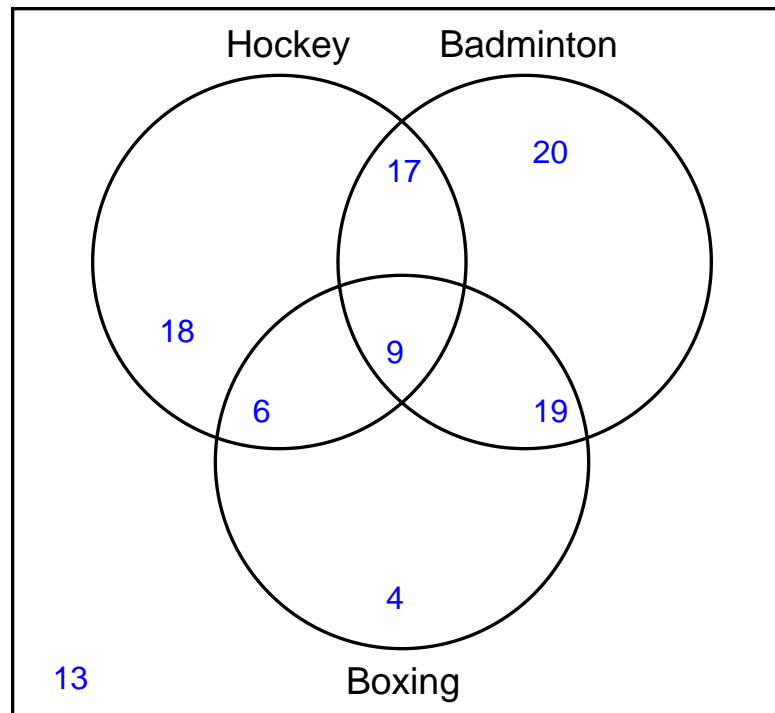
Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Answer the Questions Based on the Venn Diagram



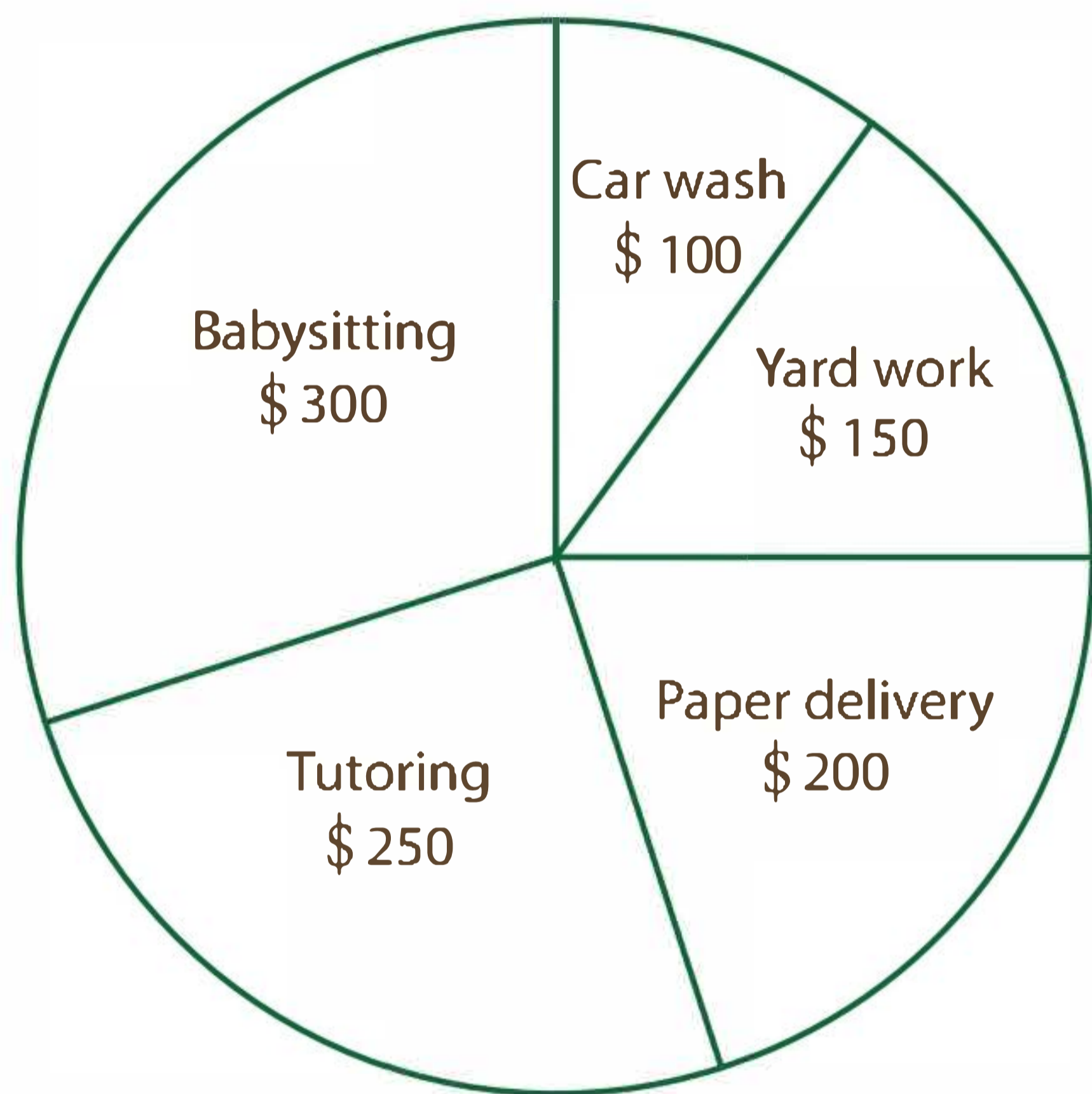
- 1) How many students only like Hockey ? 18
- 2) How many students like Hockey or Badminton ? 89
- 3) How many students like Hockey or Badminton or Boxing ? 93
- 4) How many students do not like both Hockey and Boxing ? 91
- 5) How many students do not like either Hockey or Boxing ? 33
- 6) How many students like both Hockey and Boxing ? 15
- 7) How many students like both Badminton and Boxing but not Hockey ? 19
- 8) How many students do not like either Hockey or Badminton ? 17
- 9) How many students like Hockey or Badminton but not Boxing ? 55
- 10) How many students do not like both Badminton and Boxing ? 78

## Exercise C

1. landscape
2. observant
3. apparent
4. mingle
5. obstruct
6. scholar
7. immense
8. irresponsible
9. compassion
10. rotate

**Answer Key****Pie Graph - Edna's Earnings**

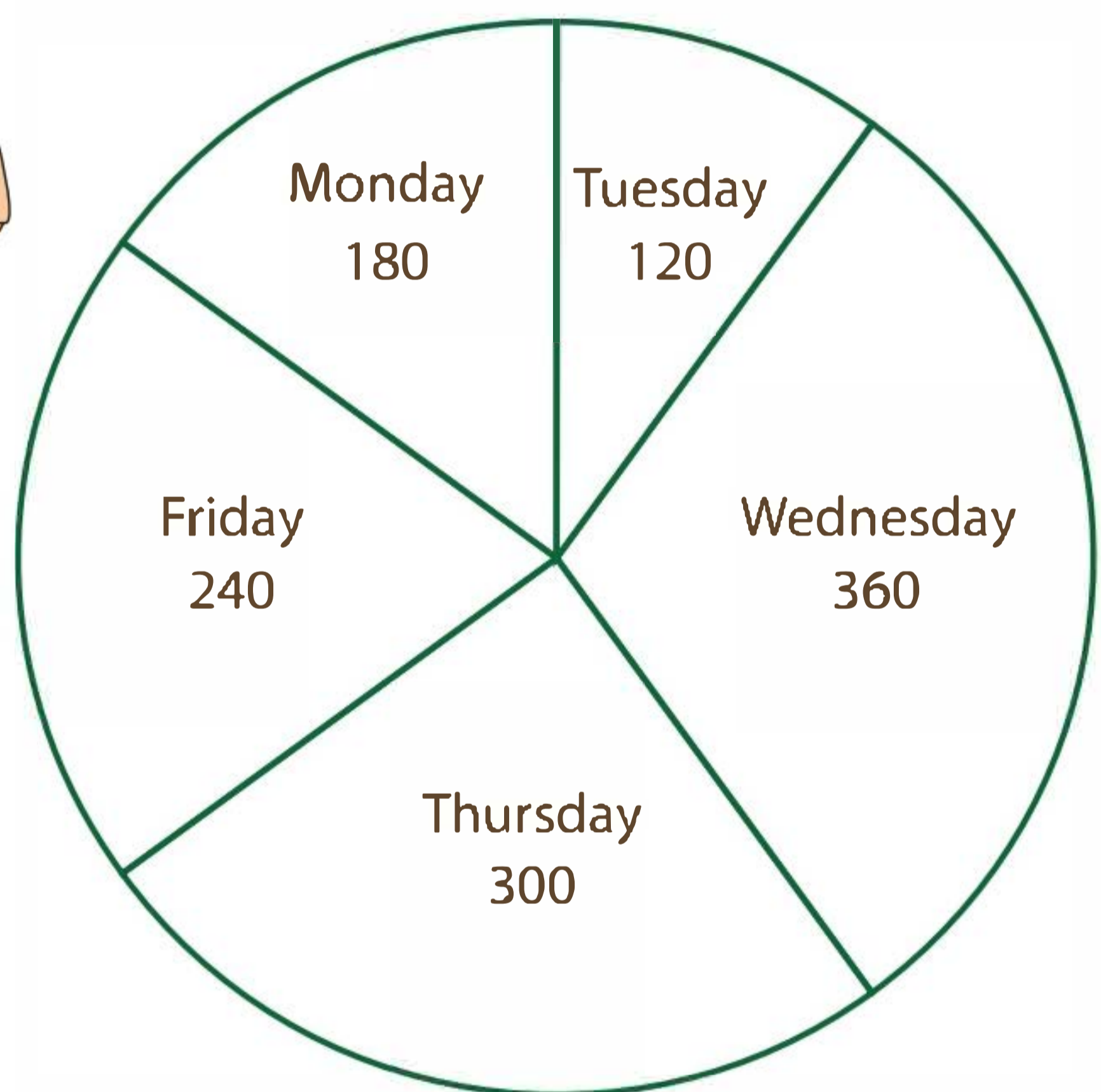
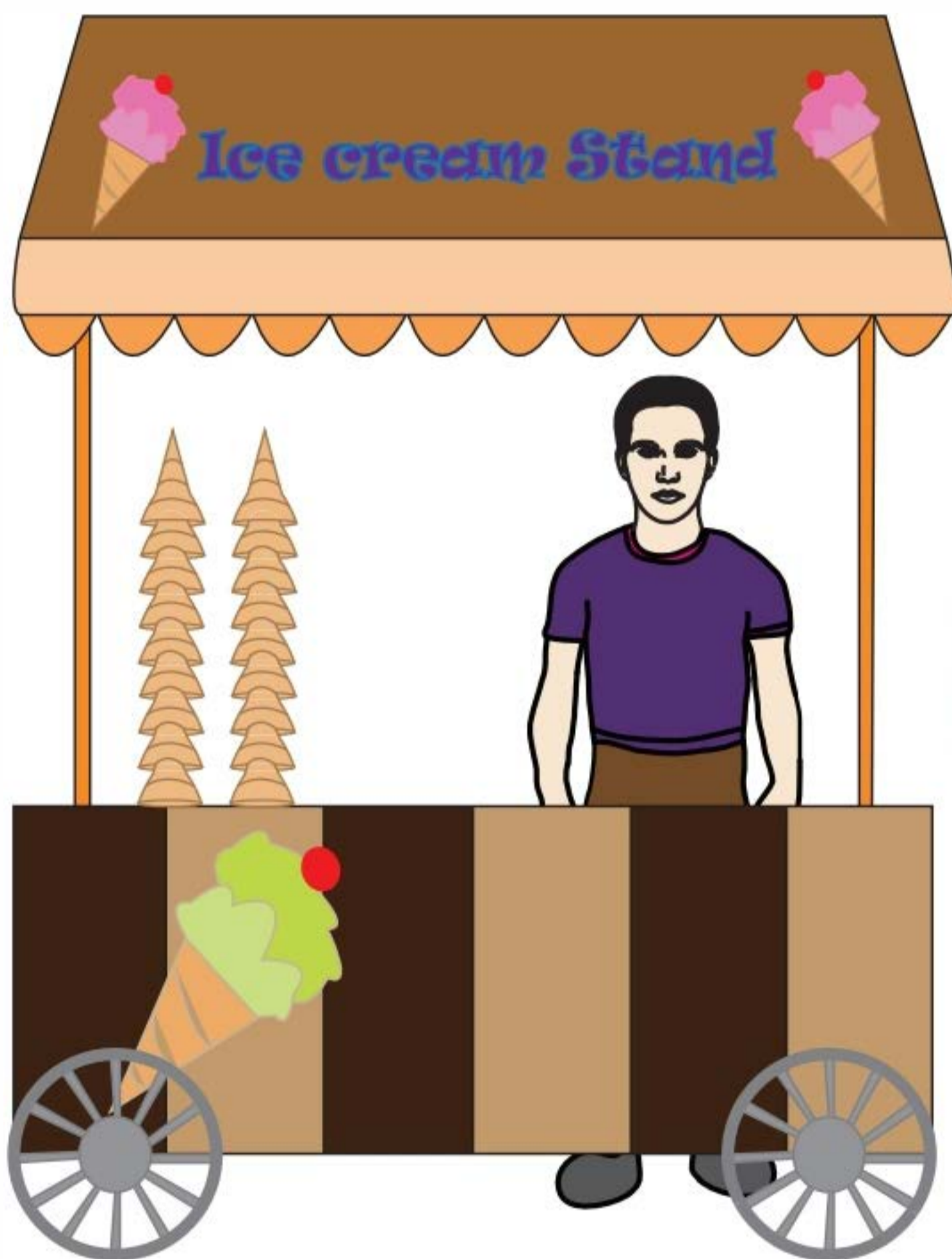
Edna earned a good income during her summer vacation. The pie graph displays the money she earned by doing different jobs. Use the pie graph to answer the questions.



- 1) What fraction of amount did she earn by doing yard work?  $\frac{3}{20}$
- 2) Which was her highly paid job? **Babysitting**
- 3) What fraction of amount did she earn tutoring?  $\frac{1}{4}$
- 4) How much she would have earned if she did not take the job as a Papergirl? **800**
- 5) Which job earned Edna twice as much as car wash? **Paper delivery**

**Answer Key****Pie Graph - Icecream Sales**

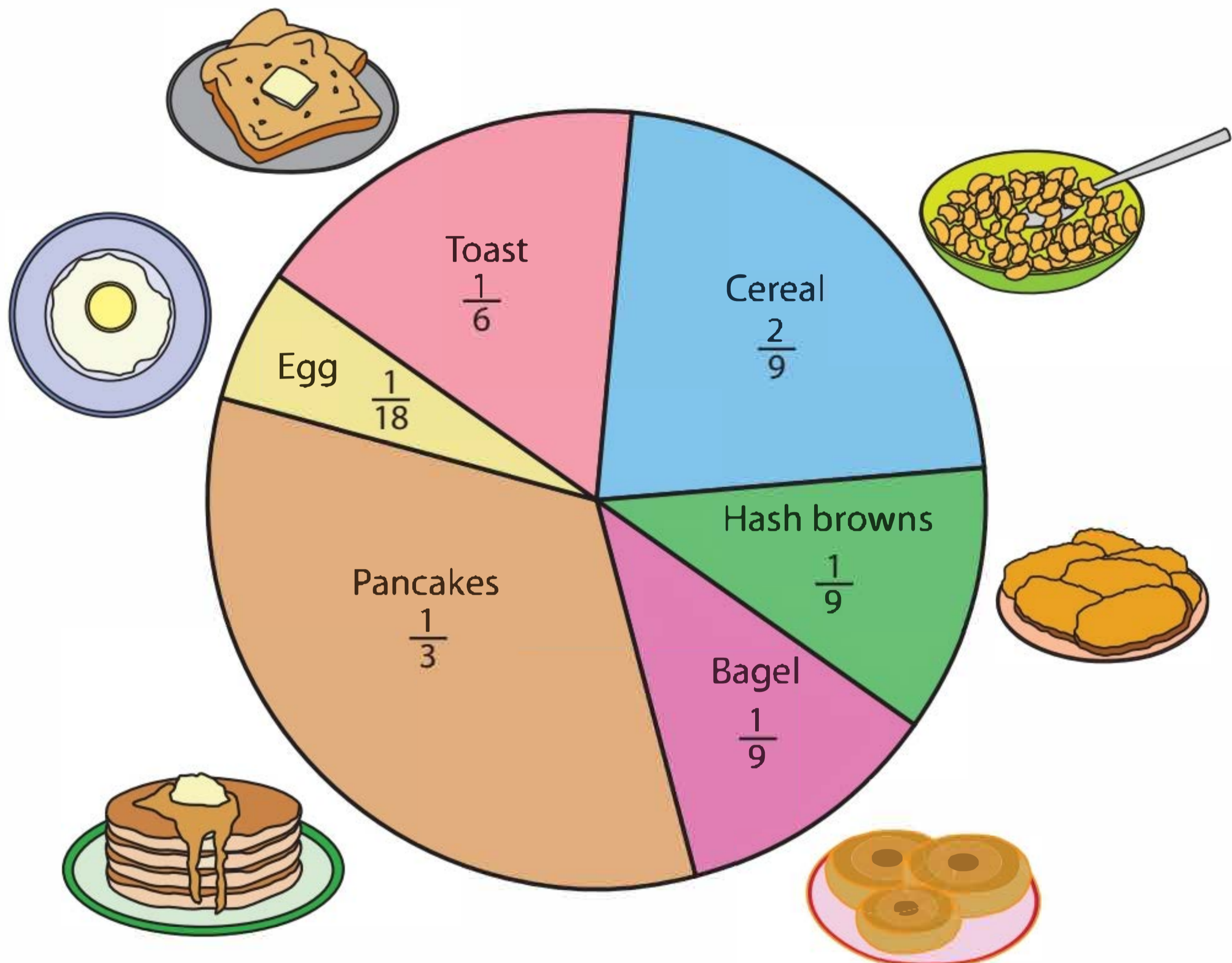
John, an ice cream seller sells ice cream during weekdays. The pie graph display the number of ice cream sold. Study the pie graph and answer the questions.



- What is the percentage of ice cream sold on Thursday? 25 %
- What are the two days that equal the sales on Wednesday? Tuesday, Friday
- When did John sell most of the ice cream in his stand? Wednesday
- On which day 300 ice creams were sold? Thursday
- What is the difference in percentage of ice cream sold between Wednesday and Friday? 10 %

**Answer Key****Pie Graph - Favorite Breakfast**

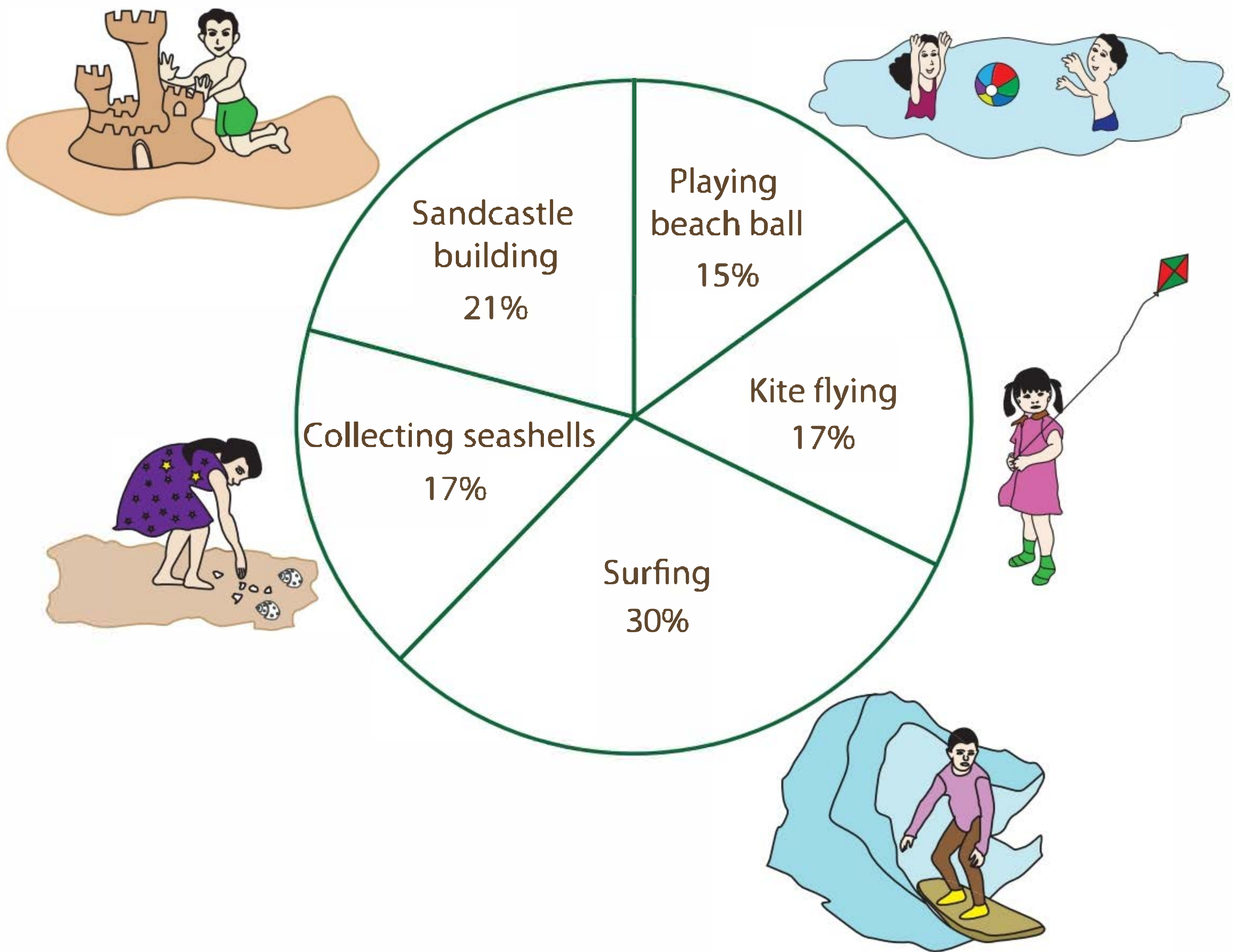
108 people were surveyed on their favorite breakfast. The pie graph is made according to their responses. Use the pie graph and answer the questions.



- How many people like to eat cereal for breakfast? 24
- Which food got half the number of votes of bagel? Egg
- How many people would like to have toast? 18
- How many people did not vote for pancakes? 72
- Which morning meal is the favorite choice of 18 people from the survey? Toast

## Pie Graph - Beach Activities

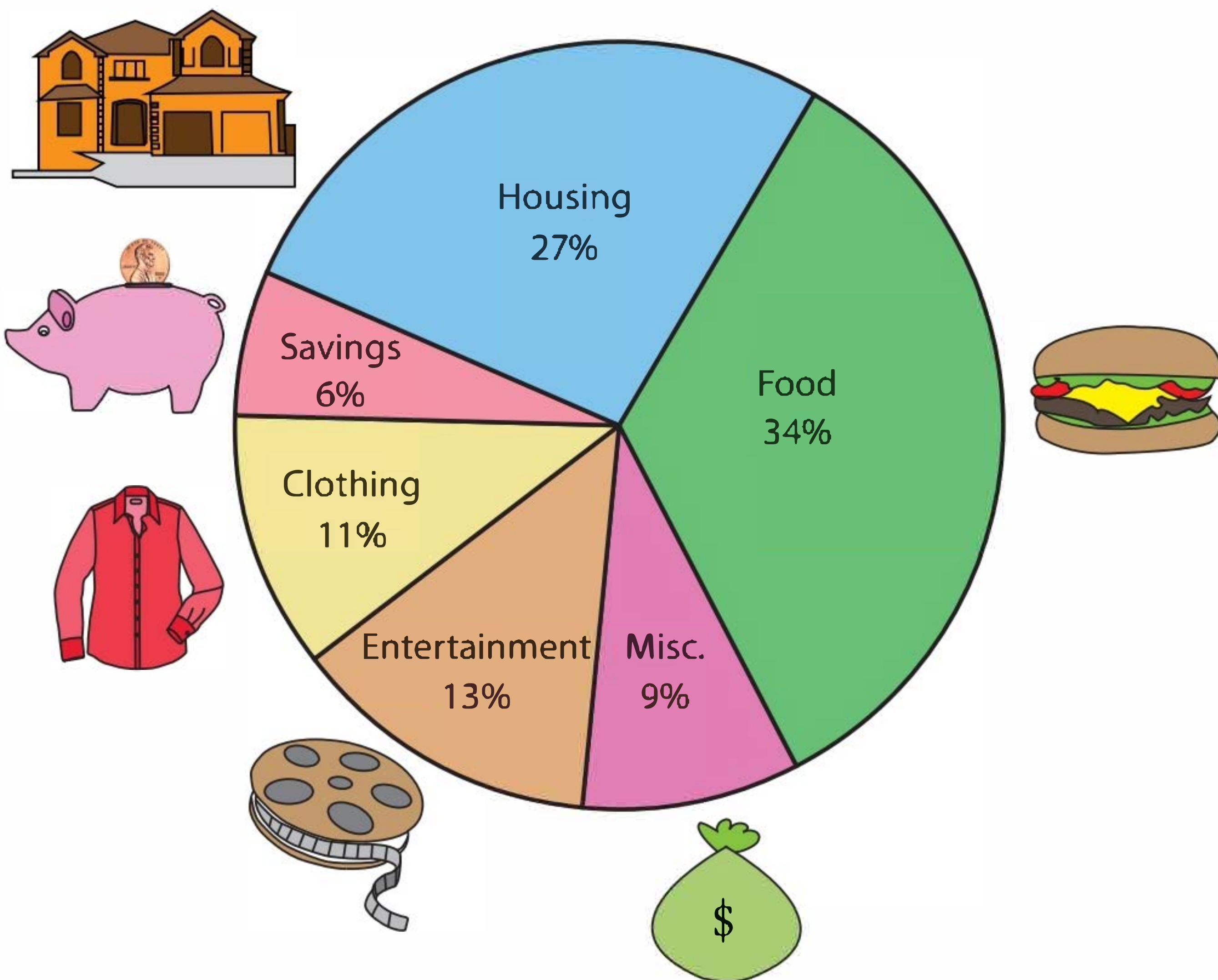
Mrs. Carolyn, teacher of Grade 5 recorded the favorite beach activities of her class. She made a pie graph based on the results. Study the graph and answer the questions.



- 1) Which activity is least popular among the fifth graders? Playing beach ball
- 2) What percentage of students like surfing? 30 %
- 3) Which two activities are equally popular? Collecting seashells, Kite flying
- 4) Which activity is the favorite of 21% students? Sandcastle building
- 5) What percentage of students like an activity other than sandcastle building? 79 %

**Answer Key****Pie Graph - Family Budget**

Adam's family expenses are 7000 dollars a month. He made a pie chart on their expenses for food, housing, savings, clothing, entertainment and miscellaneous expenses. Read the pie graph and answer the questions.



- How much money does he spend for clothing and entertainment?                     **\$1680**
- Other than housing, how much money does he have for other expenses?                     **\$5110**
- How much money is his family's food expense?                     **\$2380**
- Does he save money? If yes, how much?                     **Yes, \$420**
- Adam allotted one-third expenses of housing to miscellaneous expenses. Is the statement true?                     **True**

# Inference: Fiction

## Exercise 7 - A Day Out at Wimbledon, page 8

Question	Answer	Explanation
1	Tennis	Inferred from the line: '...marching out onto court, determinedly carrying their rackets over their shoulders. The ball boys and girls were rolling the bright yellow balls along the sides of the court.'
2	The match is about to begin.	Inferred from the line: 'All preparations were in full swing and the tension was rising.'
3	Once a year	Inferred from the line: 'Simon always enjoyed his annual trip to Wimbledon...'
4	Nice/good/sunny/ fine	Inferred from the line: '...the sun was out...'
5	Second	Inferred from the line: '...whoever won would win the Championship.'
6	He was excited/ tense/anticipating the start of the match.	Inferred from the line: 'Simon leaned forward on the edge of his seat as the match began...'

## Exercise 8 - On Holiday, page 9

Question	Answer	Explanation
1	Lunchtime/noon/ midday	Inferred from the line: 'The morning had passed agreeably and he had all afternoon ahead of him to enjoy the lake.'
2	Sailing	Inferred from the line: 'He moved the rudder towards him and let out the sails as he turned the vessel out into the lake.'
3	The rest of the afternoon	Inferred from the line: 'He would not return to the boathouse until tea-time.'
4	She owns a hotel.	Inferred from the line: '...Mrs Foot, who owned the establishment he was staying in, a large guesthouse...'
5	Gardening	Inferred from the line: '...she was wearing old clothes and green plastic gloves. He remembered her love of flowers and understood why.'
6	Sunny but cold	Inferred from the line: '...the low temperature had masked the strength of the sun.'

# Inference: Fiction

## Exercise 9 - Everyday Difficulties, page 10

Question	Answer	Explanation
1	She can't hear/is deaf.	Inferred from the line: '...due to a profound affliction which meant her life was immersed in silence.'
2	They write on a notepad.	Inferred from the line: '...often asking shopkeepers to use a pen and notepad so she could find things.'
3	A window had looked like an open doorway.	Inferred from the line: '...a trolley had been pushed through a window, which had resembled an open doorway in the strong sunlight.'
4	He was playing football/sport/as goalie.	Inferred from the line: '...he could not miss his position in goal for the local team...'
5	An old sports/two-seater car	Inferred from the line: '...her car couldn't carry much anyway as it was a two-seater coupe she had owned for twenty years.'
6	The brakes	Inferred from the line: 'Anyway, it was just as well, as the vehicle had a dangerous tendency to take too long to stop.'

## Exercise 10 - Stuck on the Mountain, page 11

Question	Answer	Explanation
1	The path is blocked by a landslide.	Inferred from the line: '...heavy rain had driven debris down the mountainside, rendering the path impassable.'
2	It was too dangerous.	Inferred from the line: '...insisted that attempts to climb down the steep descent into the valley should not be made at dusk...'
3	Go caving/ underground/ explore the labyrinth	Inferred from: 'Plans to explore the subterranean labyrinth near the youth hostel the next day had been abandoned.'
4	The weather was getting worse.	Inferred from the line: 'Molly thought bleakly that they might not see the youth hostel again: weather conditions were getting worse.'
5	Paul's injury/ twisted leg	Inferred from the line: 'Molly's friend Paul had twisted his leg so badly that he was finding it difficult to walk.'
6	Refusing to be cheered up	Inferred from the line: '...remaining pessimistic despite the jolly stories they shared to cheer themselves up.'

# Inference: Fiction

## Exercise 11 - The Team Dinner, page 12

Question	Answer	Explanation
1	Monday	Inferred from the line: '...the first day of the working week.'
2	Use a school hall as the venue for their celebratory dinner	Inferred from the line: '...able to gain use of the hall in the old school...'
3	The location amuses him - he will be relaxing where he once studied.	Inferred from the line: '...to think that he would be having a party in the place where he studied...'
4	A flat/high-rise flat/tower block	Inferred from the line: 'He now lived in a new 10-storey development on the outskirts of the town, which was incredibly modern and had fantastic views.'
5	An architect	Inferred from the line: 'He had been responsible for its design and... had drawn up the plans.'
6	Neighbours criticise the design of the building (due to its heating problems).	Inferred from the line: '...any small problem with the edifice was immediately pointed out by his neighbours, most notably the lack of adequate heating.'

## Exercise 12 - A Long Drive, page 13

Question	Answer	Explanation
1	Her car was locked in the garage.	Inferred from the line: '...she had given the garage keys to her sister...'
2	A village in Scotland	Inferred from the line: '...she set out to drive to Scotland. ...arriving in the village where she grew up...'
3	They both moved further south.	Inferred from the line: '...who had also relocated further south...'
4	Good food/her uncle is a good cook.	Inferred from the line: 'She always enjoyed a visit to his house, a fact which was more to do with his culinary skills...'
5	Bad traffic	Inferred from the line: '...progress was slow, but soon the traffic thinned...'
6	She can listen to her own music.	Inferred from the line: '...she could steal time to appreciate a few choice albums...'

# **TYPE TWENTY-TWO:**

**REAR**

**FIND**

**TRAP**

**EASE**

**CAPE**

**CORN**

**CLAY**

**PAST**

**TALK**

**STAB**

**SLIP**

**LOOK**

**MATE**

**CART**

**SEAL**

**PEST**

**SAME**

**STOP**

**LACE**

**SAND**

**Cloze Wordbank Test 23**

---

- Q1 **N**  
*adrift*
- Q2 **J**  
*describe*

- Q7 **C**  
*metals*
- Q8 **B**  
*bodies*
- Q9 **H**  
*exercise*

- Q3 **G**  
*survive*
- Q4 **I**  
*captured*
- Q5 **C**  
*escape*
- Q6 **F**  
*captors*
- Q7 **D**  
*briefly*
- Q8 **A**  
*dense*
- Q9 **K**  
*managed*
- Q10 **O**  
*rescued*

**Cloze Wordbank Test 24**

---

- Q1 **H**  
*communities*
- Q2 **E**  
*identified*
- Q3 **G**  
*necessary*
- Q4 **B**  
*information*
- Q5 **I**  
*original*
- Q6 **A**  
*surname*
- Q7 **D**  
*introduce*
- Q8 **F**  
*passed*
- Q9 **J**  
*adopted*
- Q10 **C**  
*hereditary*

- Q7 **A**  
*raised*
- Q8 **C**  
*represented*
- Q9 **I**  
*fingertips*
- Q10 **F**  
*signs*

**Cloze Wordbank Test 26**

---

- Q1 **E**  
*people*
- Q2 **G**  
*region*
- Q3 **A**  
*marker*
- Q4 **H**  
*landmarks*
- Q5 **F**  
*typically*
- Q6 **C**  
*person*
- Q7 **J**  
*stretched*
- Q8 **B**  
*carefully*
- Q9 **I**  
*Canada*
- Q10 **D**  
*featured*

**Cloze Wordbank Test 27**

---

- Q1 **D**  
*goddess*
- Q2 **E**  
*believed*
- Q3 **G**  
*homes*
- Q4 **H**

## **Cloze Wordbank Test 23**

---

- Q1** **N**  
*adrift*
- Q2** **J**  
*describe*
- Q3** **G**  
*survive*
- Q4** **I**  
*captured*
- Q5** **C**  
*escape*
- Q6** **F**  
*captors*
- Q7** **D**  
*briefly*
- Q8** **A**  
*dense*
- Q9** **K**  
*managed*
- Q10** **O**  
*rescued*

## **Cloze Wordbank Test 24**

---

- Q1** **H**  
*communities*
- Q2** **E**  
*identified*
- Q3** **G**  
*necessary*
- Q4** **B**  
*information*
- Q5** **I**  
*original*
- Q6** **A**  
*surname*
- Q7** **D**  
*introduce*
- Q8** **F**  
*passed*
- Q9** **J**  
*adopted*
- Q10** **C**  
*hereditary*

## PAGE 23 — FINDING HIDDEN FACTS

1. **Lisa** — *Lisa goes riding three times a week: on Saturday, Sunday and Wednesday.*
2. **William** — *William is only going on one holiday: cycling with Mark.*
3. **Haj** — *Haj likes three toppings: raisins, lemon curd and sausages.*
4. **Edward** — *Edward only has two activities planned: swimming and shopping.*

## PAGES 24 & 25 — MULTIPLE-STATEMENT QUESTIONS — LOGIC

1. **D** — *Max runs faster than Charlotte, and Ahmed is slower than Charlotte, so Max must run faster than Ahmed.*
2. **B** — *Josh's house has half as many bedrooms as Karl's house, so Karl's house can't have 5 bedrooms because Josh's can't have 2.5 rooms.*
3. **D** — *Jamie was born before Georgia, Laura and Rohan, so he's the oldest.*
4. **D** — *July was 7 degrees hotter than June, and August was only 2 degrees hotter than June, so July can't have been cooler than August.*
5. **B** — *Patrick's bus arrived at 7.15, Hannah's bus arrived 10 minutes later at 7.25, and Jacob's bus arrived 15 minutes after Hannah's, so Jacob's bus arrived at 7.40.*
6. **C** — *Lucy buys four banners for £3 each, so she spends a total of £12. Lily spends half as much as Lucy, so she spends £6. Grace and Dan spend £20 between them, and Dan spends £6.50, so Grace must spend £13.50, which is £7.50 more than Lily.*

# ASSESSMENT TEST 7

## Section 1 — Rotate the Figure

**1. D**

The figure is rotated 90 degrees clockwise. Option A has a black rectangle instead of a black triangle. Option B is a reflected rotation. In option C, the trapezium is rotated differently from the rest of the figure.

**2. B**

The figure is rotated 180 degrees. Options A and C are the wrong shape. Option D is a reflected rotation.

**3. A**

The figure is rotated 135 degrees clockwise. Option B has two black triangles. Option C is a reflected rotation. In option D, the triangles are positioned incorrectly.

**4. C**

The figure is rotated 45 degrees clockwise. Option A is a reflected rotation. In option B, the circles are shaded incorrectly. In option D, there are squares instead of circles.

**5. D**

The figure is rotated 225 degrees clockwise (or 135 degrees anticlockwise). In option A, the black shapes and white shapes have swapped shadings. Option B is a reflected rotation. Option C is the wrong shape.

**6. B**

The figure is rotated 180 degrees. Options A and D are the wrong shape. Option C is a reflected rotation.

**7. A**

The figure is rotated 135 degrees clockwise. In option B, the grey and white shapes have swapped shadings. In option C, the white cross is positioned incorrectly. Option D is a reflected rotation.

**8. D**

The figure is rotated 135 degrees clockwise. Option A is the wrong shape. In option B, the white rectangle is in front of the black lines. Option C is a reflected rotation.

**9. C**

The figure is rotated 270 degrees clockwise (or 90 degrees anticlockwise). Option A is a reflected rotation. Option B is the wrong shape. Option D is a reflected rotation and the black circle is in the wrong position.

**10. B**

The figure is rotated 45 degrees clockwise. Option A is a reflected rotation. Option C is a reflection. Option D is the wrong shape.

## Section 2 — Find the Figure Like the First Three

**1. B**

All figures must have four sides.

**2. D**

All figures must be reflections or rotations of the same arrow.

**3. E**

All figures must have four versions of the same shape. Two of the shapes must be black and two of the shapes must be white.

**4. E**

All figures must contain a large hatched circle and a small black circle.

**5. C**

In all figures, a T-shape must be crossed by two parallel lines.

**6. A**

In all figures, the number of points on the star must equal the number of sides of the white shape.

**7. B**

In all figures, the shape with the dotted outline must be half of the black shape.

**8. C**

All figures must have one white circle, one grey circle and one black circle. In all figures, the large shape must have six sides.

## Section 3 — 3D Rotation

- 1. B**  
*Shape B has been rotated 90 degrees clockwise in the plane of the page.*
- 2. E**  
*Shape E has been rotated 90 degrees away from you top-to-bottom.*
- 3. C**  
*Shape C has been rotated 90 degrees right-to-left.*
- 4. D**  
*Shape D has been rotated 90 degrees clockwise in the plane of the page.*
- 5. E**  
*Shape E has been rotated 90 degrees right-to-left.*
- 6. B**  
*Shape B has been rotated 90 degrees right-to-left.*
- 7. D**  
*Shape D has been rotated 90 degrees clockwise in the plane of the page.*
- 8. A**  
*Shape A has been rotated 90 degrees anticlockwise in the plane of the page. It has then been rotated 90 degrees away from you top-to-bottom.*
- 9. C**  
*Shape C has been rotated 90 degrees away from you top-to-bottom.*
- 10. F**  
*Shape F has been rotated 90 degrees right-to-left.*

## Section 4 — Odd One Out

- 1. B**  
*All other figures have a solid outer line and a dashed inner line.*
- 2. E**  
*In all other figures, the black shapes are smaller versions of the outer shape.*
- 3. D**  
*All other figures are identical apart from rotation (the circles in D are in different places).*
- 4. B**  
*In all other figures, the shape on the right is a 45 degree clockwise rotation of the shape on the left.*
- 5. C**  
*In all other figures, the feet are on the straight side of the shield shape.*
- 6. E**  
*In all other figures, the diamond is on the left of the triangle.*
- 7. A**  
*In all other figures, the white shape is at the front.*
- 8. B**  
*In all other figures, the star is next to the flagpole.*

## Section 5 — 2D Views of 3D Shapes

- 1. D**  
*There are four blocks visible from above, which rules out options A and C. There are three blocks at the front of the shape, which rules out option B.*
- 2. C**  
*There are four blocks visible from above, which rules out options A and B. There are two blocks at the front of the shape, which rules out option D.*
- 3. B**  
*There are five blocks visible from above, which rules out options A and C. There are three blocks in a row at the back of the shape, which rules out option D.*
- 4. A**  
*There are five blocks visible from above, which rules out options C and D. There are two blocks at the back of the shape, which rules out option B.*
- 5. C**  
*There are six blocks visible from above, which rules out options A and B. There is only one block on the right-hand side of the shape, which rules out option D.*
- 6. D**  
*There are five blocks visible from above, which rules out options B and C. There are three blocks at the front of the shape, which rules out option A.*
- 7. D**  
*There are five blocks visible from above, which rules out options B and C. There is one block at the front of the shape, which rules out option A.*
- 8. C**  
*There are five blocks visible from above, which rules out options A and B. There are two blocks at the front of the shape (with a gap between them), which rules out option D.*

## Quick Lesson Recap

1. What is 20% of 250?

**50**

2. What is 45% of 320?

**144**

3. What is 65% of 700?

**455**

4. Workout three-quarters of 244

**183**

5. Workout  $\frac{5}{7}$  of 357

**255**

6. Convert  $\frac{9}{15}$  into a percentage

**60%**

7. What is the mean of 11, 7, 4 and 2

**6**

8.  $5 \div 1000 =$

**0.005**

9. What is the LCM of 6 and 8 ?

**24**

10.  $(8 - 5)^2 + 3 \times 5 \div 2$

**16.5**

## Vocabulary 2

### Exercise A

1. pitiful
2. accurate
3. inoffensive
4. usher
5. inwardly
6. possess
7. intersect
8. distract
9. regain
10. hideous

### Exercise B

1. regain
2. intersect
3. inwardly
4. pitiful
5. distract
6. accurate
7. usher
8. possess
9. hideous
10. inoffensive