

4TH GRADE SUMMER MATH PACKET



- 1 Read the numbers.

43,215 43,125 43,521 43,512

Which is the greatest?

- (A) 43,125
- (B) 43,215
- (C) 43,512
- (D) 43,521

- 2 A number, when rounded to the nearest thousand, is 577,000. What could the number be?

Choose the **three** correct answers.

- (A) 575,300
- (B) 576,653
- (C) 576,799
- (D) 577,212
- (E) 577,500
- (F) 580,000

- 3 What is 89,005 in expanded form?

- (A) $8,000 + 9,000 + 5$
- (B) $80,000 + 9,000 + 5$
- (C) $80,000 + 9,000 + 50$
- (D) $80,000 + 90,000 + 500$

- 4 Look for a pattern. What is the missing number?

13,789 14,789 15,789 16,789 _____

- (A) 18,789
- (B) 17,789
- (C) 16,889
- (D) 16,689

- 5 Look at the number 130,423. Which place is the digit 0 in?

- (A) hundred thousands
- (B) ten thousands
- (C) thousands
- (D) hundreds

- 6 Which equations are true?
Choose the **two** correct answers.

- (A) $73 - 45 = 43 - 25$
- (B) $65 - 39 = 45 - 29$
- (C) $50 + 12 = 48 + 15$
- (D) $47 + 25 = 50 + 22$
- (E) $53 + 19 = 97 - 25$

- 7 A farmer has 917 pounds of mushrooms. He wants to pack all his mushrooms into sacks of 9 pounds each. What is the least number of sacks he needs?

(A) 100
(B) 101
(C) 102
(D) 103

- 8 Which problem can be solved by finding the product of 349 and 28?

(A) Kyle has 349 stickers. He packs them into packets of 28 stickers each. Find the number of packets of stickers he has.
(B) A store has 349 apples and 28 pineapples. Find the total number of apples and pineapples in the store.
(C) A baker has 349 kilograms of flour. He uses up 28 kilograms of flour to bake some cakes. Find the amount of flour he has left.
(D) 349 people attended a concert. Each concert ticket cost \$28. Find the total amount of money collected from the sale of the tickets.

- 9 What is the missing digit?

$$7,\underline{\quad}34 \div 9 = 792 \text{ R } 6$$

(A) 4
(B) 3
(C) 2
(D) 1

- 10 Which equations would be correct when the number 12 is entered in the box?

Choose the **two** correct answers.

(A) $\square \times 4 = 6 \times 8$

(B) $120 \div \square = 9 \times 2$

(C) $20 + \square = 4 \times 6$

(D) $5 \times \square = 85 - 25$

(E) $22 \times 8 = 180 - \square$

Section B Short Answer Questions

(10 × 2 = 20 points)

11 $425,783 - 167,902 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

12 $265 \times 30 =$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 13 The population of penguins on an island is 27,000 when rounded to the nearest thousand. Find the greatest possible number of penguins.

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 14 Find the common factors of 8 and 36.

Show your work and write your answer in the space below.

- 15 Find the fourth multiple of 7.

Show your work and write your answer in the space below.

- 16 Find all the prime numbers from 1 to 20. Explain how you arrived at your answers.

Show your work and write your answer in the space below.

- 17 Jacob thinks of a number between 20 and 30. When the number is divided by 4, it has a remainder of 3. What is the least value of the number? Explain how you arrived at your answer.

Show your work and write your answer in the space below.

- 18 There were 16,738 people at a basketball game. 3,241 of them were children and the rest were adults. How many more adults than children were there at the basketball game?

Show your work and write your answer in the space below.

- 19 Alex finds the difference between 41,501 and 23,495. He says that his answer is about 19,000.
Is Alex's answer reasonable? Explain.

Show your work and write your answer in the space below.

- 20 Mr. Turner sent his car to the workshop for repair work as well as to change 4 tires. Mr. Turner paid \$1,035 in all. The repair work cost 5 times the price of each tire.
The mechanic told Mr. Turner that the repair work cost about \$500. Explain the mechanic's mistake.

Show your work and write your answer in the space below.

Section C Constructed Response

(21): 3 points; (22): 3 points;

(23): 4 points)

- (21) Natalie has more than 10 coins.
When she packs the coins into bags of 6, there are no coins left.
When she packs the coins into bags of 4, there are 2 coins left.
What is the smallest possible number of coins that Natalie has?
Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

- 22 The prices of two types of vases at a shop are shown below.

Small vase	\$17
Large vase	\$23

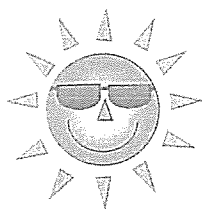
Ms. Smith bought an equal number of small vases and large vases. She paid \$520 for all the vases. How many vases did Ms. Smith buy altogether?

Write your answer and your work or explanation in the space below.

23 A melon and a bunch of bananas cost \$12. 7 melons and 5 bunches of bananas cost \$74.

- How much does each melon cost?
- How much does each bunch of bananas cost?

Write your answers and your work or explanation in the space below.



4TH GRADE SUMMER MATH PACKET



- 1 Which of the following is equal to $6 \times \frac{2}{3}$?
Choose the **two** correct answers.

- (A) 4
- (B) $\frac{24}{3}$
- (C) $12 \times \frac{3}{2}$
- (D) $6 \times 2 \times \frac{2}{3}$
- (E) $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$

- 2 How many halves are there in $5\frac{1}{2}$?

- (A) 7
- (B) 8
- (C) 10
- (D) 11

- 3 What is the value of $4\frac{5}{6} - 2\frac{1}{6}$?

- (A) $4\frac{1}{6}$
- (B) $2\frac{5}{6}$
- (C) $2\frac{1}{6}$
- (D) $2\frac{2}{3}$

- 4 What are the missing whole numbers?

$$\square - \square \frac{3}{4} = 2 \frac{1}{4}$$

- (A) 4; 2
 - (B) 5; 2
 - (C) 6; 4
 - (D) 7; 3
- 5 What is the value of $1\frac{1}{3} + 5\frac{1}{3}$?

- (A) $1\frac{2}{3}$
- (B) $5\frac{2}{3}$
- (C) $6\frac{1}{3}$
- (D) $6\frac{2}{3}$

- 6 What is $10\frac{1}{5}$ as a decimal?

- (A) 1.01
- (B) 2.2
- (C) 10.1
- (D) 10.2

- 7 Look at 13.08. What is 0.05 less than the value of the digit in the hundredths place?
- (A) 0.95
 - (B) 2.95
 - (C) 9.95
 - (D) 0.03
- 8 What is 10 dollars 8 cents in decimal form?
- (A) \$1.08
 - (B) \$1.80
 - (C) \$10.08
 - (D) \$10.80
- 9 Which numbers or expressions have the same value as 163 hundredths? Choose the **two** correct answers.
- (A) 0.16
 - (B) 1.6
 - (C) $1 + 0.6 + 0.03$
 - (D) one ten six ones three tenths
 - (E) sixteen tenths three hundredths

10 What is 7.25 as a mixed number in simplest form?

(A) $7\frac{25}{100}$

(B) $7\frac{5}{20}$

(C) $7\frac{1}{5}$

(D) $7\frac{1}{4}$

Section B Short Answer Questions

(11 to 18 Part A, 18 Part B,

18 Part C: 2 points each)

- 11 What is 0.3 less than 35.68?

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 12 Use all the digits 0, 6, 3, 7, and 5 just once to form the least decimal with two decimal places. (The digit 0 cannot be in the first place of the decimal.)

Explain how you arrived at your answer.

Write your answer and explanation in the space below.

- 13 Look for a pattern. What is the missing decimal?

7.5 7.3 7.1 _____ 6.7 6.5 6.3

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 14 What is 71.55 when rounded to the nearest tenth?

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 15 What is the missing number?

$$\frac{4}{12} = \frac{1}{\quad}$$

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 16 Compare the decimals. Write < or >.

1.23 1.3

- 17 There were $15\frac{1}{5}$ liters of water in a tank. Luke used $10\frac{3}{5}$ liters of water to wash the family car. He needed $4\frac{2}{5}$ liters of water to water the plants after that.

Did Luke have enough water to water the plants? Explain.

Show your work and write your answer in the space below.

- 18 This question has three parts.

Part A

Tiana has purple ribbon and green ribbon. She has $\frac{1}{5}$ meter of purple ribbon and $\frac{3}{5}$ meter of green ribbon. How much ribbon does Tiana have in all?

Show your work and write your answer in the space below.

Part B

Ana gives Tiana $\frac{2}{5}$ meter of blue ribbon. How much more green ribbon than blue ribbon does Tiana have?

Show your work and write your answer in the space below.

Part C

After giving Mariah $\frac{1}{5}$ meter of red ribbon, Ana has $\frac{2}{5}$ meter of red ribbon left. How much red ribbon did Ana have at first?

Show your work and write your answer in the space below.

Section C Constructed Response

(19: 3 points; 20: 3 points;

21: 4 points)

- 19 Carla has 0.3 meter of string. David has $\frac{15}{100}$ meter of string. David tells Carla that his string is longer because 15 is greater than 3. Explain David's mistake.

Write your answer and your work or explanation in the space below.

- 20 Jackson played a number game with his friends. He thought of a number and wrote down some clues.

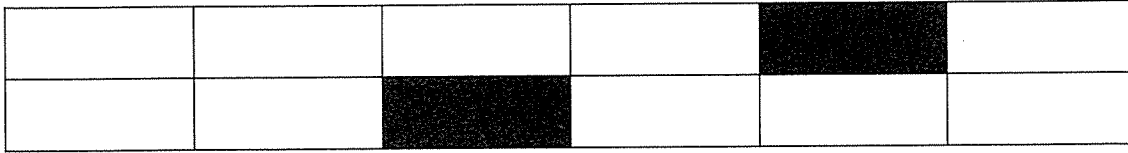
Clues:

- (A) The number is smaller than 7 and has 2 decimal places.
- (B) The number becomes 7 when rounded to the nearest whole number.
- (C) The digit in the tenths place is an even number.
- (D) The digit in the hundredths place is the greatest 1-digit odd number.
- (E) None of the digits are repeated.

What number did Jackson think of? Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

- 21 A rectangle is divided into 12 equal parts. Zachary says that he has to shade 8 more parts so that $\frac{2}{3}$ of the rectangle is shaded.

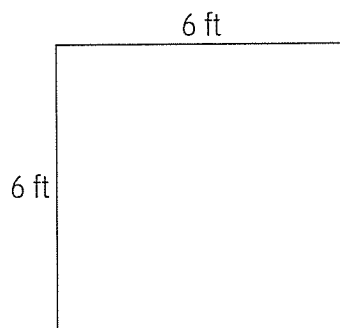


- Explain Zachary's mistake.
- How many more parts should Zachary shade?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

- 6 The length of a side of a square is 6 feet. What is the perimeter of the square?

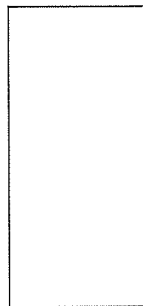
- (A) 6 feet
- (B) 12 feet
- (C) 24 feet
- (D) 36 feet



- 7 The width of a rectangle is half of its length. The width and the length of the rectangle are whole numbers greater than 2 and less than 10. What could the area of the rectangle be?

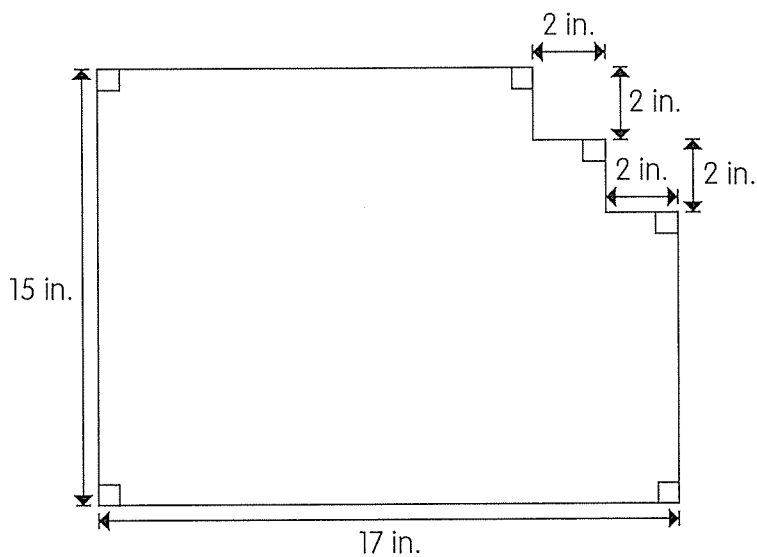
Choose the **two** possible answers.

- (A) 8 square meters
- (B) 16 square meters
- (C) 18 square meters
- (D) 32 square meters
- (E) 50 square meters



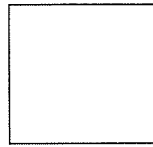
- 8 What is the perimeter of the figure?

- (A) 64 inches
- (B) 60 inches
- (C) 44 inches
- (D) 32 inches



- 9 The perimeter of a square is 32 meters. What is its area?

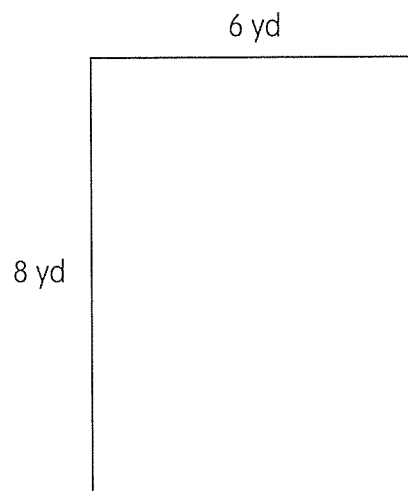
- (A) 16 square meters
- (B) 32 square meters
- (C) 64 square meters
- (D) 256 square meters



Perimeter = 32 m

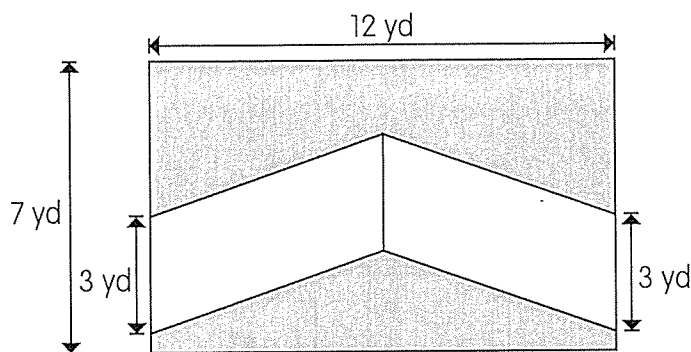
- 10 The length of a rectangle is 8 yards. The width of the rectangle is 6 yards. What is the area of the rectangle?

- (A) 12 square yards
- (B) 16 square yards
- (C) 24 square yards
- (D) 48 square yards



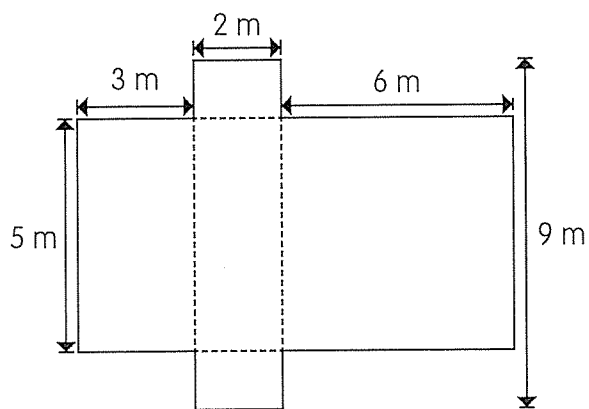
- 17 Find the area of the shaded parts of the figure.

Show your work and write your answer in the space below.



- 18 Find the perimeter of the figure.

Show your work and write your answer in the space below.



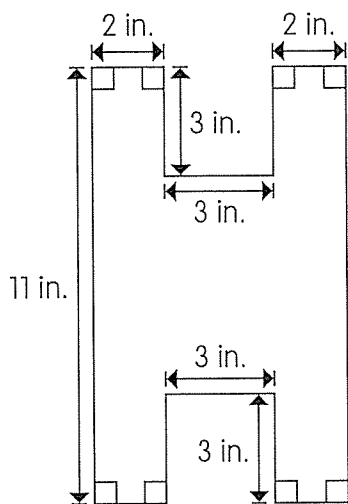
- 19 Chloe says the area of a square with a side length of 10 inches is larger than the area of a square with a side length of 1 foot. She says this is because 10 is greater than 1.

Explain Chloe's mistake.

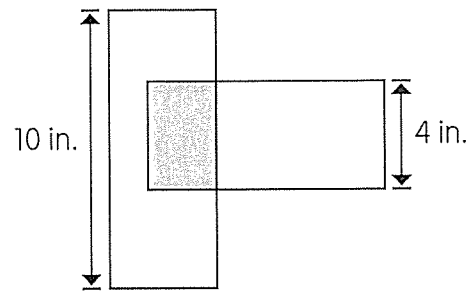
Show your work and write your answer in the space below.

- 20 Find the area of the figure.

Show your work and write your answer in the space below.

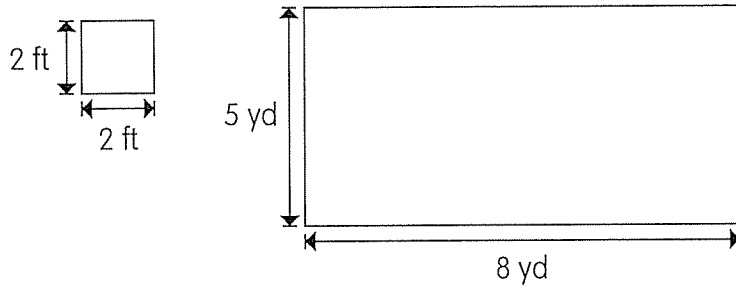


- 22 Tyler had two identical rectangular pieces of paper overlapping as shown. The area of the overlapping part was 5 in^2 . What was the area of the parts that were not overlapping?



Write your answer and your work or explanation in the space below.

- 23 Ivan had to lay tiles each measuring 2 feet by 2 feet in a room. The rectangular floor of the room measured 8 yards by 5 yards.



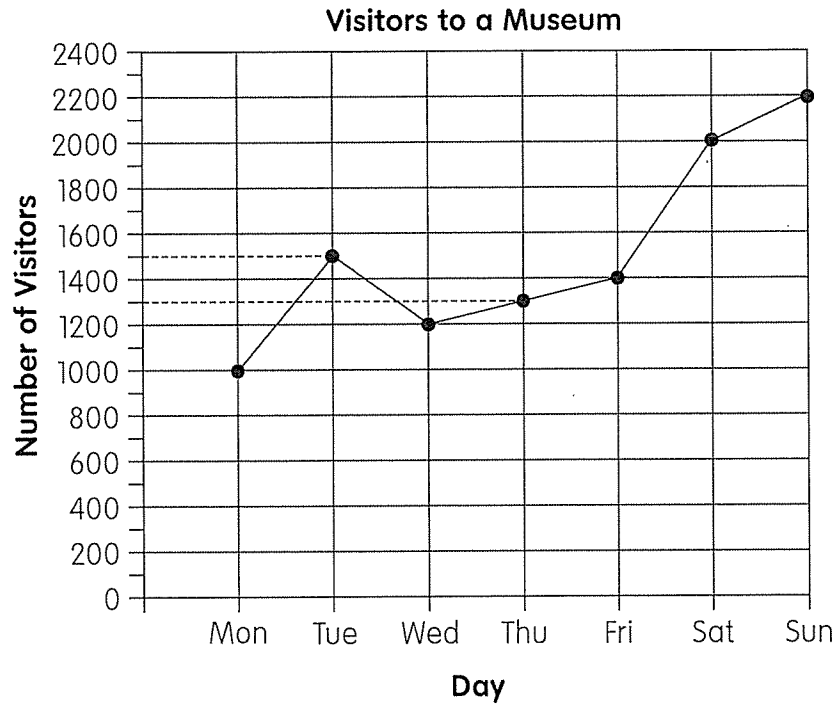
- How many tiles could fit on the floor?
- What is the area of the floor that would be left uncovered?

Write your answer and your work or explanation in the space below.

7

This question has two parts.

The line graph shows the number of visitors to a museum in a particular week.



Part A

How many visitors were there on Tuesday?

- (A) 1,300
- (B) 1,400
- (C) 1,500
- (D) 1,600

Part B

On which day were there 700 fewer visitors than on Saturday?

- (A) Monday
- (B) Wednesday
- (C) Thursday
- (D) Friday

- 8 This question has two parts.
The table shows the number of books that students in a class read in a week.

Number of Books Read	1	2	3	4	more than 4
Number of Students	10	8	6	5	10

Part A

How many students read only 1 book a week?

- (A) 5
- (B) 6
- (C) 8
- (D) 10

Part B

Which statement about the table is **not** true?

- (A) 15 students read more than 3 books in a week.
- (B) The total number of books read in a week was 39.
- (C) 18 students read 2 books or less in a week.
- (D) Less than half the class read 4 books or more.

- 15 The table shows the number of waffles sold by 4 children in a fundraising event. Some data is missing.

Write your answers in the table below.

Name	Vanilla Waffles	Chocolate Waffles	Strawberry Waffles	Total Number
Alex	8		13	36
Ella	12	14	14	40
June		6	12	
Noah		8		35
Total	59	43		150

- 16 The table shows information about 25 coins that Caleb, John, Alyssa, and Faith have each. Some data is missing. John says that he has the greatest amount of money while Faith has the least. Is John correct? Explain.

Write your answers in the table and space below.

Name	Number of Quarters	Value of Quarters (\$0.25)	Number of Dimes	Value of Dimes (\$0.10)	Total Value
Caleb	12	\$3.00	13	\$1.30	\$4.30
John			10	\$1.00	
Alyssa	11	\$2.75	14	\$1.40	\$4.15
Faith	6	\$1.50			

- 18 The table below shows the number of movie tickets sold at a movie theater over six days.

Day	1	2	3	4	5	6
Number of Tickets Sold	3,506	4,250	2,753	5,255	4,002	3,758

How many more tickets were sold on day 2 than on day 5?

Write your answer in the answer grid.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 20 The table shows Diego's mass over the last six years.

Age (years)	0	1	2	3	4	5	6
Mass (kg)	3	9	11	14	18	21	25

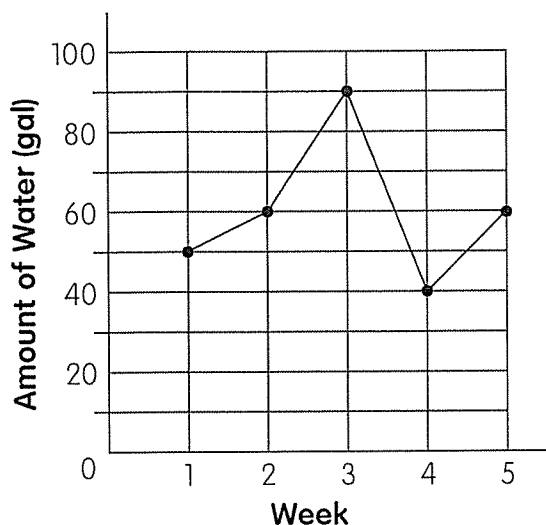
Eric says that he wants to present the data in a bar graph.

- Is Eric's choice of graph suitable? If his choice is not suitable, which type of graph should he use?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

- 21 The line graph below shows the amount of water used by the Smiths each week, over five weeks.

Amount of Water Used over Five Weeks



- During which week did the Smiths use the least amount of water?
- From the graph, Amy tells her father that the greatest increase in water usage was between weeks 2 and 3. Is Amy correct? Explain.

Write your answers and your work or explanation in the space below.