5ᵀᴴ GRADE SUMMER MATH PACKET

1 What is the product of 670 and 10^2?

   Ⓐ 670

   Ⓑ 6,700

   Ⓒ 67,000

   Ⓓ 670,000

2 What is the value of 420,000 divided by 70 tens?

   Ⓐ 600

   Ⓑ 4,200

   Ⓒ 6,000

   Ⓓ 7,000

3 A printing company uses 307 reams of paper in a month. Each ream has 500 sheets of paper. How many sheets of paper does the printing company use in 10 months?

   Ⓐ 3,070

   Ⓑ 5,000

   Ⓒ 153,500

   Ⓓ 1,535,000

4 What is the sum of $7\frac{3}{8}$ and $2\frac{5}{6}$?

(A) $9\frac{4}{7}$

(B) 10

(C) $10\frac{1}{3}$

(D) $10\frac{5}{24}$

5 A store had 11 kilograms of granola. $7\frac{6}{11}$ kilograms of granola were sold. How much granola was left in the store?

(A) $3\frac{4}{11}$ kg

(B) $3\frac{5}{11}$ kg

(C) $4\frac{5}{11}$ kg

(D) $4\frac{6}{11}$ kg

6 Which expression is equal to $\frac{8}{11}$?

(A) $8 + 11$

(B) 8×11

(C) $\frac{11}{8}$

(D) $8 \div 11$

7 Which of the following is **not** equal to the product of $\frac{7}{3}$ and 5?

(A) $\frac{7}{3} + \frac{7}{3} + \frac{7}{3} + \frac{7}{3} + \frac{7}{3}$

(B) $\frac{5}{3} \times 7$

(C) $11\frac{2}{3}$

(D) 35

8. What is the missing number?

$$\frac{12}{7} \times \frac{5}{6} = 1\frac{?}{7}$$

(A) 2

(B) 3

(C) 18

(D) 60

9. Which of the following has the same value as $\frac{1}{5} \div 3$?

(A) $\frac{1}{5} \times \frac{1}{3}$

(B) $5 \div \frac{1}{3}$

(C) $3 \div 5$

(D) $15 \div 3$

10. The width of a piece of cloth is $3\frac{1}{2}$ meters. Its length is $1\frac{1}{3}$ times its width. What is the area of the piece of cloth?

(A) $4\frac{2}{3}$ m²

(B) $6\frac{2}{9}$ m²

(C) $16\frac{1}{3}$ m²

(D) $21\frac{7}{9}$ m²

Section B Short Answer Questions

11 Write 5,029,736 in expanded form.

12 7,030 × 29 =

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 Yuna had 115 beads. She packed the beads into bags of 15. She wants to put all of the beads into bags. She said that she would need 8 bags.

Do you agree with Yuna? Explain.

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

14 $250 - 100 \div 5 =$

Write your answer in the answer grid.

15 $(42 - 10) \times 3 - (36 + 6) =$

Write your answer in the answer grid.

16 $\dfrac{3}{5} \div 2 =$

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

17 Matthew ran $4\frac{3}{4}$ miles and swam $1\frac{5}{6}$ miles in a race. What was the total distance of the race?

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

18 Jackson is preparing to host a party and he plans to prepare 40 cups of punch. Each cup can hold $\frac{1}{5}$ liter of the punch. Jackson mixes $2\frac{5}{8}$ liters of syrup with $8\frac{2}{5}$ liters of water.

Does Jackson have enough punch for the party? Explain.

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

19 Diego took $3\frac{3}{4}$ hours to read a book. Isaiah took $\frac{1}{3}$ hour less to read his book. How much time did they spend reading in all?

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

20 A rectangular wall measures $9\frac{1}{3}$ meters by $2\frac{1}{7}$ meters. What is the area of the wall?

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

Section C Constructed Response

21 Zoe wanted to make 8 bracelets but was short of 115 beads. She made 3 bracelets and found that she had 240 beads left. How many beads did Zoe have?

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

22 Liam baked some cookies. $\frac{7}{8}$ of them were almond cookies and the rest of them were chocolate cookies. He gave away $\frac{1}{2}$ of the almond cookies and $\frac{5}{8}$ of the chocolate cookies. He gave away 132 cookies in all. How many cookies did Liam bake at first?

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

23 Jack had some marbles. He gave $\frac{2}{9}$ of them to John and $\frac{3}{7}$ of the remainder to Landon. Then, Jack bought 45 new marbles and had 15 more marbles than what he had at first. Zane said that Jack had 30 marbles at first because $45 - 15 = 30$.

- Explain Zane's mistake.
- How many marbles did Jack have at first?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.
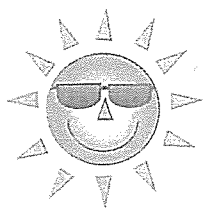
5TH GRADE SUMMER MATH PACKET

1 What is 7.108 as a mixed number in simplest form?

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

(B) $7\frac{18}{25}$

(C) $7\frac{11}{125}$

(D) $7\frac{27}{250}$

2 What is 1.025 as a fraction in simplest form?

(A) $1\frac{1}{4}$

(B) $1\frac{1}{8}$

(C) $1\frac{1}{40}$

(D) $1\frac{1}{125}$

3 What is the sum of the value of digit 3 in 1.293 and the value of digit 5 in 2.59?

(A) 0.35

(B) 0.305

(C) 0.503

(D) 0.8

© 2020 Marshall Cavendish Education Pte Ltd

4 What is 6.389 when rounded to the nearest hundredth?

(A) 6.37

(B) 6.38

(C) 6.39

(D) 6.40

5 What is $8\frac{8}{1,000}$ as a decimal?

(A) 8.008

(B) 8.08

(C) 8.8

(D) 8.88

6 What is the sum of 7.08 and 2.5?

(A) 9.13

(B) 9.508

(C) 9.58

(D) 10.3

7 What are the missing digits?

$$
\begin{array}{r}
\square . \square \, 2 \\
+ \quad 3 . 2 \quad \\
\hline
7 . 1 \, 2
\end{array}
$$

(A) 2; 9

(B) 3; 9

(C) 4; 9

(D) 9; 2

8 Which of the following has a value of 10.5?
Choose the **two** correct answers.

(A) 0.021×50

(B) 0.021×500

(C) 0.21×50

(D) 0.21×500

(E) 2.1×500

9 A tank contained 7.02 liters of water. 550 milliliters of water were poured out. How many milliliters of water were left in the tank?

(A) 64,700 milliliters

(B) 6,470 milliliters

(C) 647 milliliters

(D) 6.47 milliliters

10. Amanda ran a number of laps around a track. Each lap was 0.4 kilometer long. She ran a total distance of 1.2 kilometers. Dan ran 2 more laps than Amanda around the same track. How many kilometers did Dan run?

(A) 0.2 km

(B) 0.8 km

(C) 2 km

(D) 2.4 km

Section B   Short Answer Questions

11 The distance between the library and Wyatt's house is 1.86 kilometers, rounded to the nearest 2 decimal places. Find the greatest and least possible distance in 3 decimal places before it was rounded to the nearest hundredth. Explain how you arrived at your answer. Use the number line to help you.

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

1.85   1.86   1.87
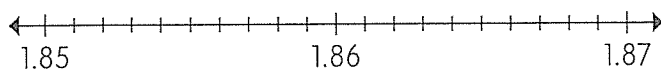
12 What is $8\frac{3}{8}$ as a decimal?

Write your answer in the answer grid.

13 $3.5 + 1.2 =$

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 5.36 less than 29.78?

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 Express 9.875 as a mixed number in simplest form.

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

16 $2.8 \div 40 =$

Write your answer in the answer grid.

17 Estimate the value of 27.18 × 2 by rounding to the nearest whole number.

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

18 Kevin bought 7 melons that cost $2.75 each. He gave the cashier $20. He said that he received $0.75 change.

Was Kevin correct? Explain.

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

19. There are two pieces of ribbon. One piece is 6.42 feet long. The other piece is 1.56 feet shorter. Sanjay needs 12 feet of ribbon for a party.

Does Sanjay have enough ribbon? Explain.

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

20. Ivan saved $7.50. Kylie saved twice as much as Ivan. Pedro saved $3.80 more than Kylie. How much did Pedro save?

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

Section C   Constructed Response

21 The result of a 100-meter race is as shown.

Athlete	Time (seconds)
Andrea	15.325
Brianna	14.501
Carla	15.243
Daniella	14.498
Emilia	15.401
Fátima	14.975

Fátima said that she came in last.

- Explain Fátima's mistake.
- Which position was Fátima in?
- Explain how you arrived at your answer.

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

22 Three boys recorded their long jump distances. Eric jumped 6 centimeters further than Daniel. Eddie jumped 0.12 meter further than Eric. The three boys jumped a total of 5.19 meters. How far did Eddie jump?

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

23 4 pears and 6 apples cost $6.90. 6 pears and 4 apples cost $7.60. What is the cost of 1 pear? What is the cost of 1 apple?

Write your answer and your work or explanation in the space below.
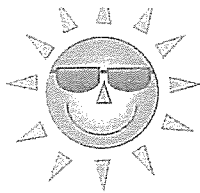
5 This question has two parts.
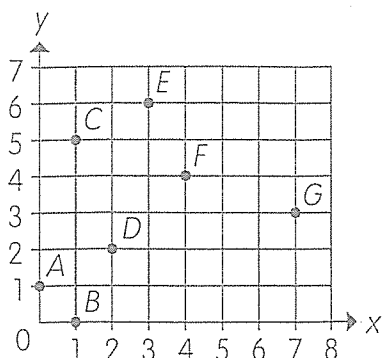
Part A

What are the coordinates of point *E*?

(A) (3, 6)

(B) (3, 7)

(C) (4, 4)

(D) (7, 3)

Part B

Which of the following statements is **not** true?

(A) The coordinates of point *F* are (4, 4).

(B) Point *G* is 6 units to the right and 2 units below point *C*.

(C) Point *D* is 2 units to the left and 2 units below point *F*.

(D) Points *B*, *C*, and *G* form an obtuse triangle.

6 This question has two parts.
The line plot shows the volumes of water in 8 bottles.

Each ✗ represents 1 bottle.
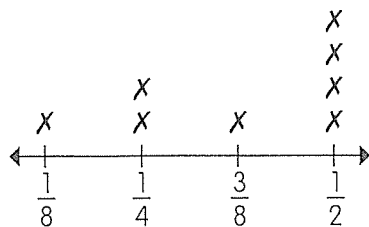
Volume of water (qt)

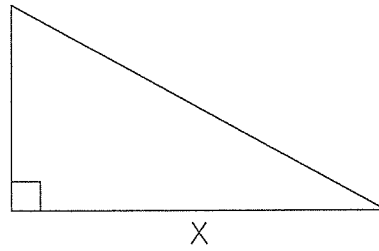## Part A

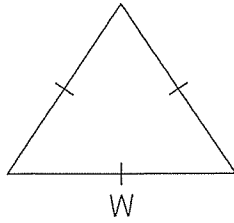What is the total volume of water in the 8 bottles?

(A) 1 quart

(B) 2 quarts

(C) 3 quarts

(D) 4 quarts

Part B

The total volume of water in the 8 bottles is redistributed equally into each bottle. What is the volume of water in each bottle now?

(A) $\frac{1}{2}$ quart

(B) $\frac{3}{8}$ quart

(C) $\frac{1}{4}$ quart

(D) $\frac{1}{8}$ quart

7 Which of the following is an equilateral triangle?
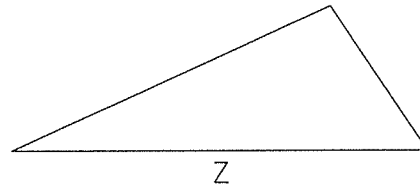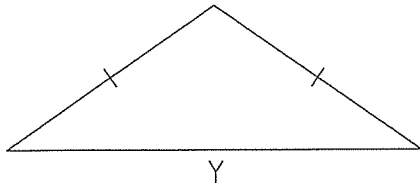
(A) W

(B) X

(C) Y

(D) Z

8 Which figure is always a rectangle?

(A) Parallelogram

(B) Quadrilateral

(C) Rhombus

(D) Square

13. This question has two parts.

The table shows the amount of juice in 10 cartons.

Amount of juice (pt)	$\frac{1}{9}$	$\frac{2}{9}$	$\frac{1}{3}$	$\frac{4}{9}$	$\frac{5}{9}$
Number of cartons	2	1	4	0	3

Part A
Use the data to make a line plot.

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

Part B
Melanie says that there are $1\frac{2}{3}$ pints of juice in all the cartons because $\frac{1}{9} + \frac{2}{9} + \frac{1}{3} + \frac{4}{9} + \frac{5}{9} = 1\frac{2}{3}$.

Explain Melanie's mistake. What should the correct answer be?

14. This question has two parts. Factory A produces 150 pairs of jeans in 1 day. Factory B produces 100 pairs of jeans in 1 day.

## Part A

Complete the number pattern.

Write your answer in the tables below. Explain how you arrived at your answer.

Factory A						
Number of Days	0	1	2	3	4	5
Total Number of Pairs of Jeans Produced	0	150	300	450		

Factory B						
Number of Days	0	1	2	3	4	5
Total Number of Pairs of Jeans Produced	0	100	200	300		

Part B

Plot each point on a coordinate plane and make line graphs below.

Jeans Production in Factories A and B
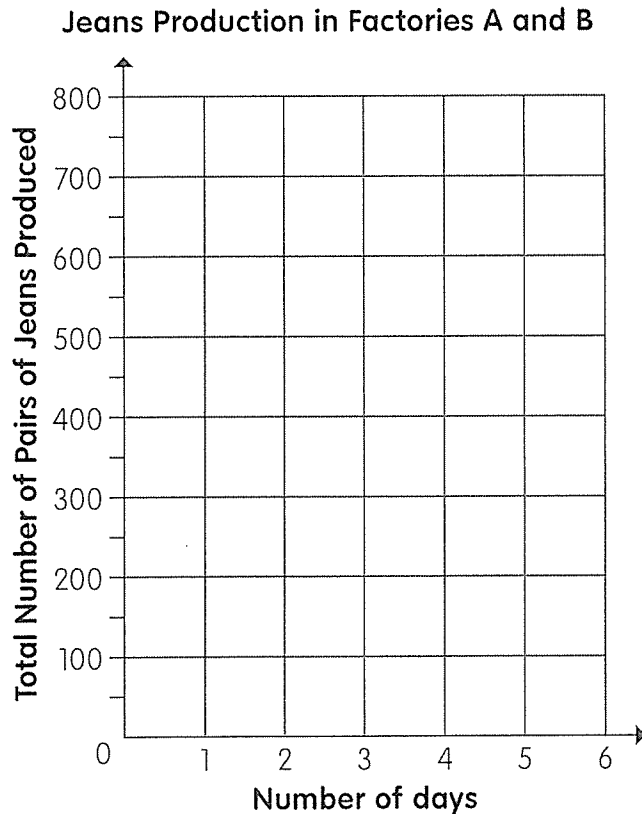
16 Look at Set A and Set B.
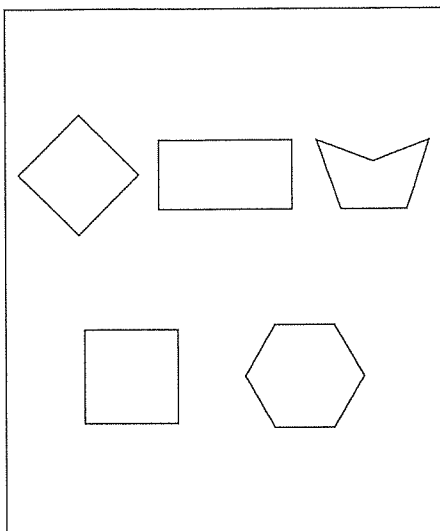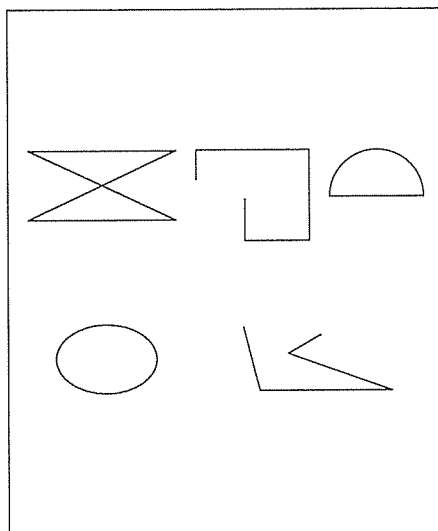

Set A   Set B

Write the answer in the blank.

Set _____ consists of polygons.

18 Water flows out of Faucet X at 4 liters per minute while water flows out of Faucet Y at 3 liters per minute. Tyler presents the data in the table below.

Time (min)	1	2	3	4	5	6
Amount of water from Faucet X (L)	4	8	12	16	20	24
Amount of water from Faucet Y (L)	3	6	9	12	15	18

Plot each point on the coordinate plane and make line graphs below.

Water Flow from Faucets X and Y
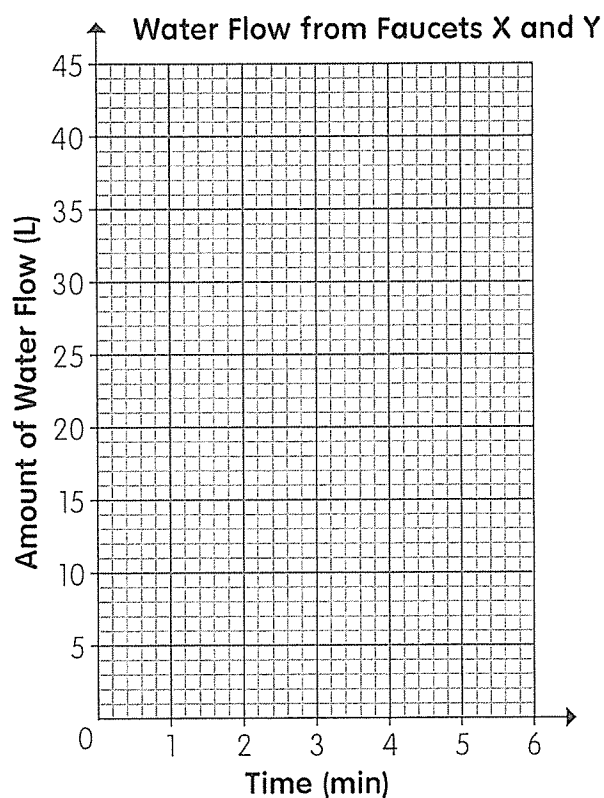
Tyler places a tank below each faucet to collect the water that flows out. He says that the water collected from Faucet X is always 1 liter more than that from Faucet Y at each point in time. Explain his mistake.
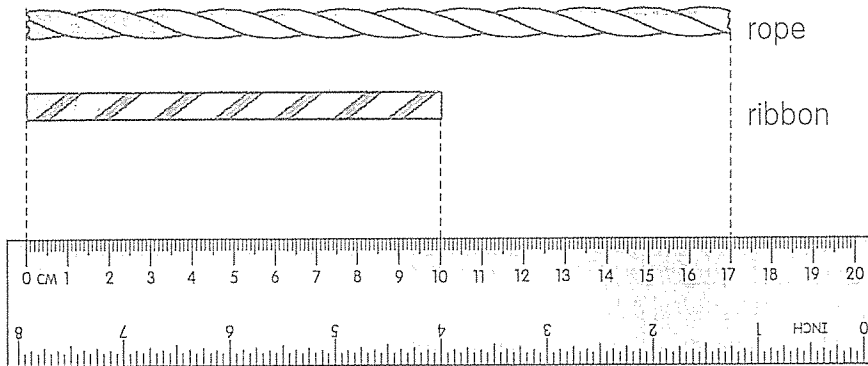
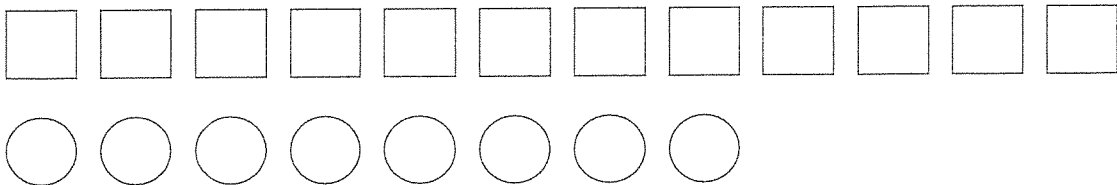Write your answer and your work or explanation in the space below.
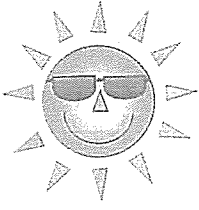
5ᵀᴴ GRADE SUMMER MATH PACKET

1 What is the ratio of the length of the ribbon to the total length of the ribbon and the rope?

(A) 10 : 17

(B) 10 : 27

(C) 17 : 10

(D) 17 : 27

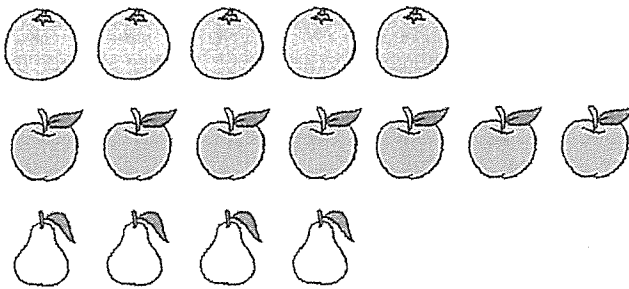**2** What is the ratio of the number of squares to the number of circles in the simplest form?

(A) 12 : 8

(B) 8 : 12

(C) 3 : 2

(D) 2 : 3

3 What is the missing number?

$13 : 5 =$ _____ $: 25$

(A) 65

(B) 33

(C) 26

(D) 18

4 What is the ratio of the number of pears to the number of oranges to the number of apples?

(A) $7 : 4 : 5$

(B) $4 : 5 : 7$

(C) $5 : 7 : 4$

(D) $5 : 7 : 11$

5 What are the missing numbers?

$3 : 8 : 6 =$ _____ $:$ _____ $:$ _____

Choose the **two** correct answers.

(A) 21; 26; 24

(B) 12; 32; 30

(C) 9; 24; 18

(D) 5; 12; 10

(E) 6; 16; 12

Section B Short Answer Questions

11 A log is cut into two pieces in the ratio 5 : 3. The length of the longer piece is 15 feet long. What is the length of the shorter piece?

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

12 The ratio of the number of adults to number of children in a hall is 6 : 4. There are 96 adults and 40 girls. How many boys are in the hall?

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

13 Brady, Molly, and Faith save $96 in all. Brady saves $36 and Molly saves $24. Express the amount of Brady's savings to the amount of Molly's savings to the amount of Faith's savings as a ratio in simplest form.

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

14 The ratio of the number of toy cars Andre, Rachel, and Haley had was 3 : 7 : 4. Haley had 24 toy cars. How many toy cars did Rachel have?
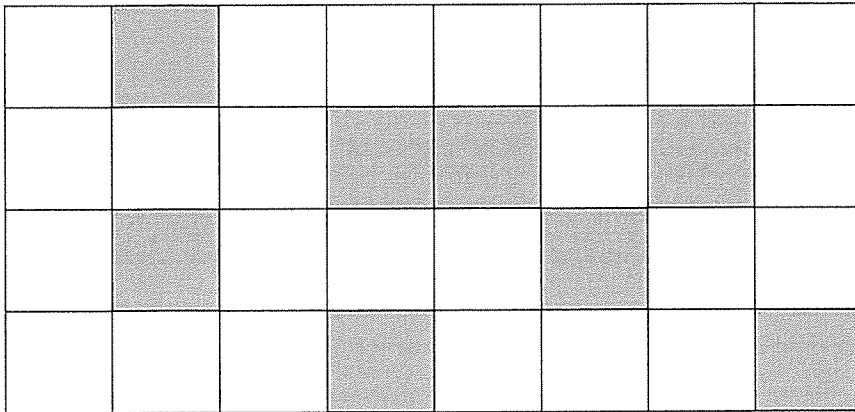
Show your work and write your answer in the space below.

Section C Constructed Response

21 The figure below is made up of identical squares. How many more squares should be shaded so that the ratio of the number of shaded squares to the number of unshaded squares is 3 : 5?

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

22 The ratio of the number of shirts sold on Monday to the number of shirts sold on Tuesday to the number of shirts sold on Wednesday was 3 : 5 : 1. The total number of shirts sold during the three days was 450.

Olivia says that 50 shirts were sold on Monday.

- Explain Olivia's mistake.
- What should the correct answer be?

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