

**CATHOLIC HIGH SCHOOL
MID-YEAR EXAMINATION 2013
MATHEMATICS
PRIMARY 4**

Name : _____ ()

Class: Primary 4 : _____

Date: 20 May 2013

Duration: 1 h 45 min

| | |
|-------------|-----|
| Section A | 40 |
| Section B | 40 |
| Section C | 20 |
| Total Marks | 100 |

Parent's Signature: _____

There are 3 sections consisting of 19 pages in this paper.

Section A: Multiple-Choice Questions (MCQ) 20 x 2 marks

Section B: Open-Ended Questions 20 x 2 marks

Section C: Story Sums 5 x 4 marks

Section A: Multiple-Choice Questions (40 marks)

Questions 1 to 20 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). SHADE the oval completely. All diagrams are not drawn to scale.

1. In which of the following numbers, is the digit 4 in the hundreds place?

- (1) 27 564
- (2) 54 109
- (3) 63 422
- (4) 89 343

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2. 37 thousands and 59 tens is the same as _____.

- (1) 3 759
- (2) 37 059
- (3) 37 509
- (4) 37 590

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3. In which of the following are the numbers arranged from the smallest to the greatest?

- | | (smallest) | | (greatest) |
|-----|------------|---|------------------------|
| (1) | 2680 | , | 2068 , 2608 |
| (2) | 2680 | , | 2608 , 2668 |
| (3) | 2068 | , | 2680 , 2608 |
| (4) | 2068 | , | 2608 , 2680 |

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4. $3\frac{2}{9} = \frac{\square}{18}$

Find the missing numerator.

- (1) 15
- (2) 29
- (3) 58
- (4) 98

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5. Find the value of $\frac{5}{8} - \frac{1}{3}$.

(1) $\frac{4}{5}$

(2) $\frac{3}{15}$

(3) $\frac{7}{24}$

(4) $\frac{23}{24}$

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6. Which of the following numbers when rounded off to the nearest hundred becomes 4300?

(1) 4229

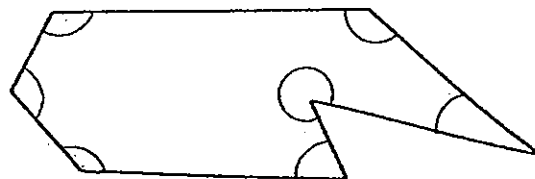
(2) 4292

(3) 4359

(4) 4392

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7. In the figure below, how many angles are more than 90° ?



(1) 5

(2) 6

(3) 7

(4) 4

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8. A number gives a quotient of 94 and a remainder of 3 when it is divided by 6. Which of the following is this number?

- (1) 112
- (2) 288
- (3) 567
- (4) 582

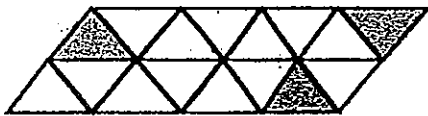
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9. How many quarters are there in $2\frac{1}{2}$ turns?

- (1) 16
- (2) 10
- (3) 3
- (4) 5

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10. The figure below is made up of 16 identical triangles. How many more triangles must be shaded so that $\frac{3}{4}$ of the figure is shaded?



- (1) 8
- (2) 9
- (3) 10
- (4) 12

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11. A T-shirt costs \$18. A pair of shorts costs \$5 more than a T-shirt. A pair of shoes costs twice as much as the total cost of a T-shirt and a pair of shorts. How much does a pair of shoes cost?

- (1) \$36
- (2) \$41
- (3) \$62
- (4) \$82

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12. Adam had 75 stickers. He lost 40 stickers and sold some of them. The number of stickers he had left was $\frac{1}{5}$ of what he had at first. How many stickers did he sell?

- (1) 15
- (2) 20
- (3) 35
- (4) 60

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13. Jim has some blue marbles, red marbles and yellow marbles. He has 64 more blue marbles than red marbles and 13 less blue marbles than yellow marbles. He has 351 yellow marbles. How many red marbles does he have?

- (1) 274
- (2) 290
- (3) 338
- (4) 415

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14. What is $\frac{1}{4}$ turn more than 135° ?

- (1) 180°
- (2) 225°
- (3) 270°
- (4) 315°

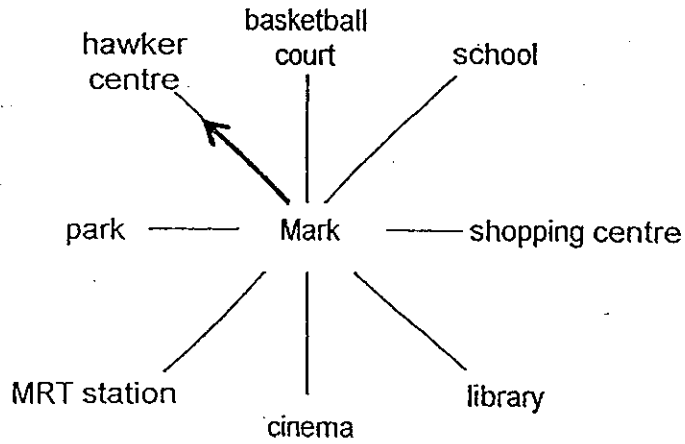
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15. 2 televisions and 1 printer cost \$1754. Each television cost \$184 more than a printer. How much does the printer cost?

- (1) \$462
- (2) \$690
- (3) \$787
- (4) \$877

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16.



Mark is facing the hawker centre. After he turns 270° anti-clockwise, where will he face?

- (1) school
- (2) MRT station
- (3) basketball court
- (4) shopping centre

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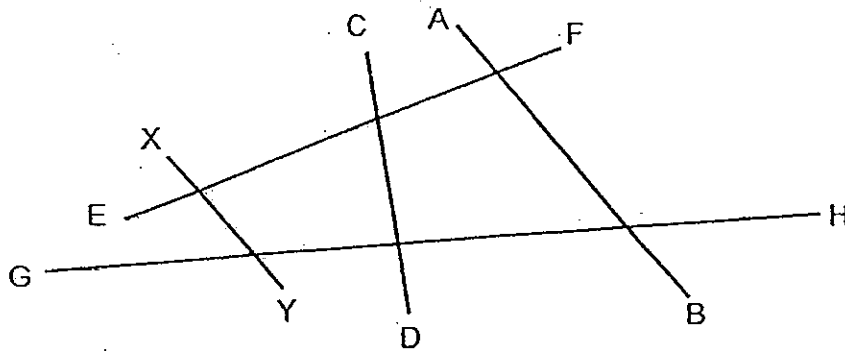
17. Mike ran $\frac{4}{9}$ km on Monday. He ran $\frac{5}{6}$ km more on Tuesday than on Monday.

What was the total distance he ran on the 2 days?

- (1) $1\frac{5}{18}$ km
- (2) $1\frac{13}{18}$ km
- (3) $2\frac{1}{9}$ km
- (4) $2\frac{4}{9}$ km

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18. The figure below is made up of straight lines.



Which line is parallel to XY?

- (1) EF
- (2) CD
- (3) AB
- (4) GH

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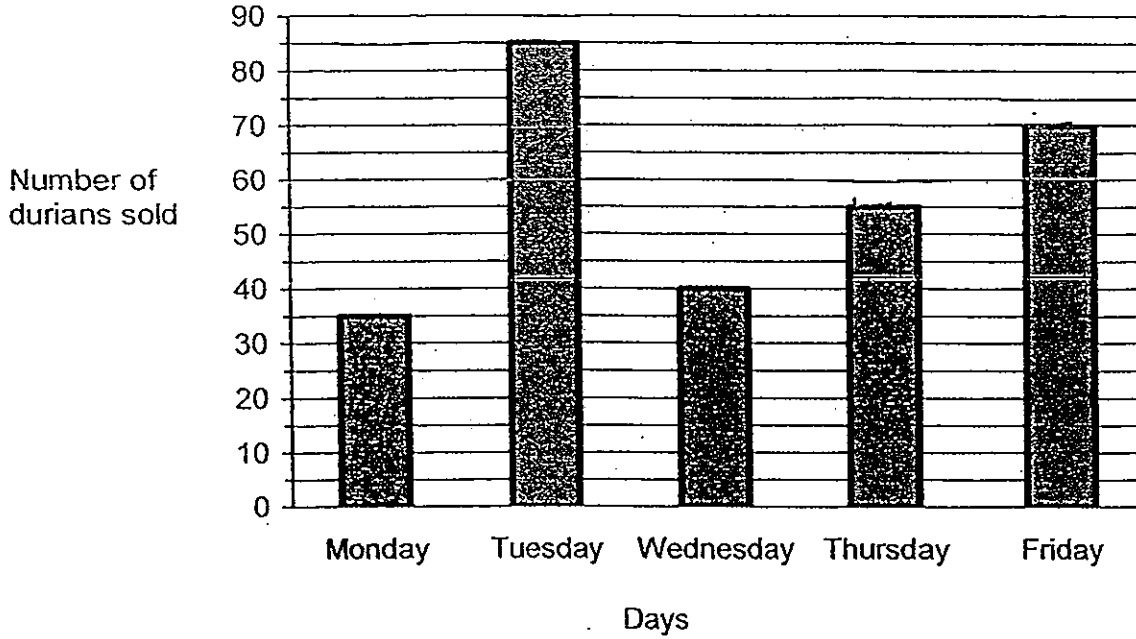
19. Joshua had 72 stamps. He gave $\frac{1}{6}$ of the stamps to a friend and $\frac{1}{3}$ of the stamps to his brother. How many stamps did he have left?

- (1) 12
- (2) 16
- (3) 24
- (4) 36

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Study the graph carefully and answer question 20.

The bar graph below shows the number of durians sold at a fruit shop from Monday to Friday.



20. What is the total number of durians sold in the 5 days?

- (1) 285
- (2) 295
- (3) 305
- (4) 315

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Section B: Short Answer Questions (40 marks)

Question 21 to 40 carries 2 marks each. Write your answer in the blank provided.

21. List the common factors of 32 and 56.

Ans: _____

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this space.

22. Form the largest possible odd number with all the digits.
Each digit can only be used once.

| | | | |
|---|---|---|---|
| 3 | 9 | 8 | 0 |
|---|---|---|---|

Ans: _____

23. Find the value in the blank.

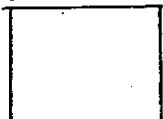
$$48 \times 32 = (48 \times 30) + \underline{\hspace{2cm}}$$

Ans: _____

24. Arrange the following fractions in descending order.

$\frac{3}{11}$, $\frac{1}{3}$, $\frac{3}{5}$

Ans: _____

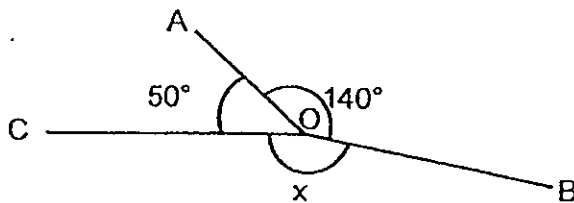


25. Find the value of $3\frac{3}{5} - 1\frac{2}{7}$.

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Ans: _____

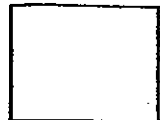
26. AO, BO and CO are straight lines meeting at point O. Find $\angle x$.



Ans: _____°

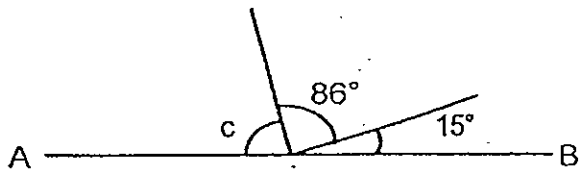
27. A bottle contains $\frac{1}{9} \ell$ of water. It contains $\frac{3}{4} \ell$ less water than a pail. How much water does the pail contain?
(Express your answer as fraction in the simplest form.)

Ans: _____ ℓ



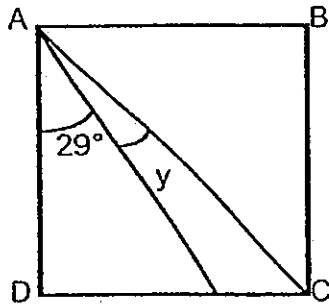
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28. Line AB is a straight line. Find $\angle c$.



Ans: _____°

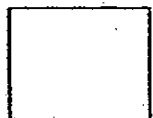
29. ABCD is a square. Find $\angle y$.



Ans: _____°

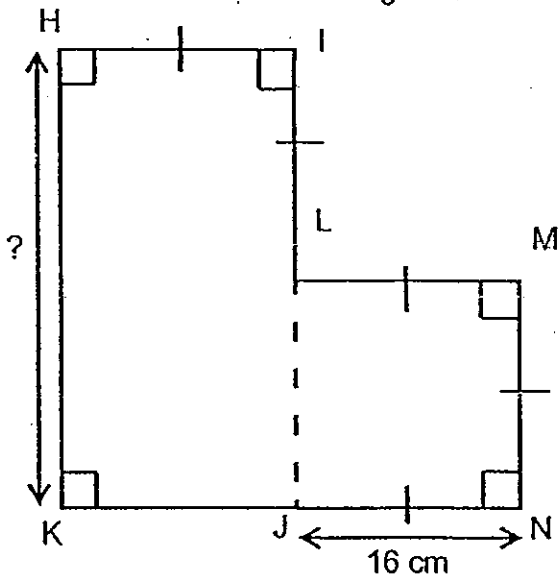
30. A shopkeeper bought 420 boxes of chocolates. There were 15 chocolates in each box. He repacked all the chocolates into packets of 9 chocolates each. How many packets of chocolates were there?

Ans: _____



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31. The figure HILMNJK is made up of a square LMNJ and a rectangle HIJK.
Find the unknown length HK.



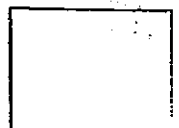
Ans: _____ cm

32. Thomas baked some buns. He gave $\frac{2}{5}$ of the buns away and sold the remaining 84 buns. How many buns did he have at first?

Ans: _____

33. Sam has $\frac{3}{7}$ as many erasers as Tom. They have a total of 130 erasers.
How many more erasers does Tom have than Sam?

Ans: _____



34. A tennis racket cost twice as much as a soccer ball. A jersey cost thrice as much as a tennis racket. The total cost for the 3 items was \$342.
What was the cost of the soccer ball?

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space

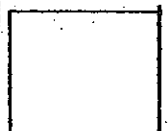
Ans: \$ _____

35. There are 105 children at a class party. $\frac{1}{3}$ of the number of girls is equal to $\frac{1}{2}$ of the number of boys. How many boys are there at the party?

Ans: _____

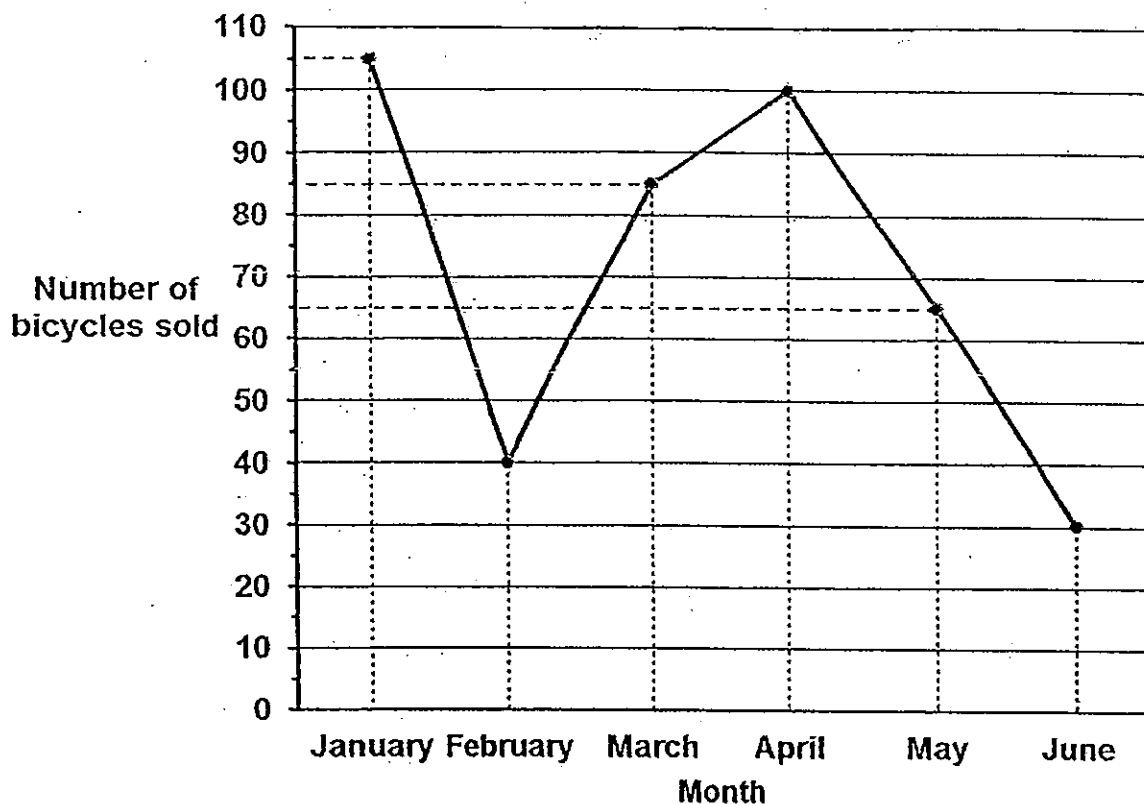
36. Rick and Mary had an equal number of stickers at first. After Rick gave away 155 stickers and Mary lost 15 stickers, Mary had 6 times as many stickers as Rick. How many stickers did Rick have in the end?

Ans: _____



Study the graph carefully and answer questions 37 and 38.
The graph shows the number of bicycles sold from January to June.

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37. What is the greatest decrease in sale of bicycles from one month to the next?

Ans: _____

38. Express the least number of bicycles sold as a fraction of the most number of bicycles sold. Express the answer in the simplest form.

Ans: _____

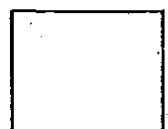
39. Fabian had thrice as much money as Tim at first. After Fabian spent \$167 and Tim spent \$25, both of them had an equal amount of money left.
How much did Tim have at first?

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this space.

Ans: \$ _____

40. Barry and Carl had an equal number of marbles at first. After Barry gave 52 marbles to Carl, Barry had $\frac{1}{5}$ as many marbles as Carl. How many marbles did Barry have in the end?

Ans: _____



Section C: Long Answer Questions (20 marks)

Question 41 to 45 carries 4 marks each. Write your answer in the blank provided.
Show your workings clearly.

41. Addison, Bryan and Calvin share some cards. Addison and Bryan have 4059 cards. Addison and Calvin have 3135 cards. Bryan has 4 times as many cards as Calvin. Calvin packs his cards into bundles of 7 cards each.
How many bundles does he have?

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this space.

Ans: _____ [4]

42. There are some apples and oranges in a box. The number of oranges is $\frac{2}{5}$ the number of the apples. There are 156 more apples than oranges. $\frac{3}{4}$ of the fruits in the box are rotten. How many fruits are not rotten?

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Ans: _____ [4]

43. Dan, Eve and Frank shared the cost of a present. Dan paid \$34 more than Eve and Frank paid \$53 less than Dan. The total cost of the present was \$207.
How much did Eve pay for the present?

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this space.

Ans: _____ [4]

44. Jeremy was given some money to buy some notebooks. If he were to buy 18 notebooks, he would be short of \$4. If he were to buy 13 notebooks, he would have \$11 left. How much money was he given to buy notebooks?

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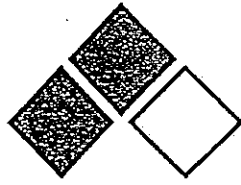
Ans: _____ [4]

45. The patterns below are made up of identical shaded and unshaded squares.

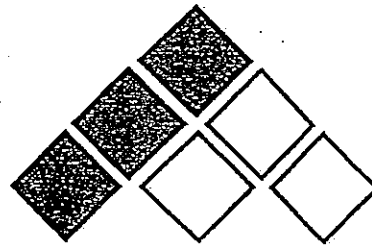
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Pattern 1



Pattern 2



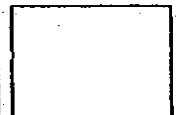
Pattern 3

- a) How many shaded squares are there in Pattern 4?
- b) How many unshaded squares are there in Pattern 4?
- c) Find the total number of squares in Pattern 10.

Ans: a) _____ [1]

b) _____ [1]

c) _____ [2]



END OF PAPER.
Have you checked your work?

ANSWER SHEET

EXAM PAPER 2013

SCHOOL : CATHOLIC HIGH

SUBJECT : PRIMARY 4 MATHEMATICS

TERM : SA1

| | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 |
| 3 | 4 | 4 | 3 | 3 | 2 | 1 | 3 | 2 | 2 | 4 | 2 | 1 | 2 | 1 | 1 | 2 |

| | | |
|----|-----|-----|
| 18 | Q19 | Q20 |
| 3 | 4 | 1 |

- Q21) 1,2,4,8
Q22) 9803
Q23) 96
Q24) $\frac{3}{5}$ $\frac{1}{3}$ $\frac{3}{11}$
Q25) 2 $\frac{11}{35}$
Q26) 170
Q27) $\frac{31}{36}$
Q28) 79
Q29) 16
Q30) 700
Q31) 32
Q32) 140
Q33) 52
Q34) 38
Q35) 42
Q36) 28
Q37) 65
Q38) $\frac{2}{7}$
Q39) 71
Q40) 26

$$\begin{aligned} \text{Q41) } 3u &= 4059 - 3135 = 924 \\ 1u &= 924/3 = 308 \\ 308/7 &= 44 \end{aligned}$$

$$\begin{aligned} \text{Q42) } 3u &= 156 \\ 1u &= 156/3 = 52 \\ 7u &= 52 \times 7 = 364 \\ 364/4 &= 91 \\ 91 \times 3 &= 273 \\ 364 - 273 &= 91 \end{aligned}$$

$$\begin{aligned} \text{Q43) } 53 - 34 &= 19 \\ 19 + 53 &= 72 \\ 207 - 72 &= 135 \\ 135/3 &= 45 \\ 45 + 19 &= 64 \end{aligned}$$

$$\begin{aligned} \text{Q44) } 5 \text{ notebooks} &= 11 + 4 = 15 \\ 1 \text{ notebook} &= 15/5 = 3 \\ 13 \text{ notebooks} &= 3 \times 13 = 39 \\ 39 + 11 &= 50 \end{aligned}$$

$$\text{Q45a) } 4$$

$$\text{b) } 6$$

$$\text{c) pattern 10: shaded} = 10$$

$$\begin{aligned} \text{unshaded} &= 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 \\ &= 45 \end{aligned}$$

$$45 + 10 = 55$$