END-OF-YEAR EXAMINATION 2016
MATHEMATICS
BOOKLET A
PRIMARY THREE

Name: _____ (   )   Class: Primary 3 ___

Date: 27 October 2016   Duration of Booklets A & B: 1 hour 45 minutes

For each of the following questions, four options are given. Choose the correct option and shade its oval (1, 2, 3 or 4) in the Optical Answer Sheet provided.

1. 7 480 m = _____ km _____ m.

    (1)   7 km 48 m

    (2)   7 km 480 m

    (3)   70 km 48 m

    (4)   70 km 480 m

2. 3 080 is 100 more than _____.

    (1)   2 080

    (2)   2 980
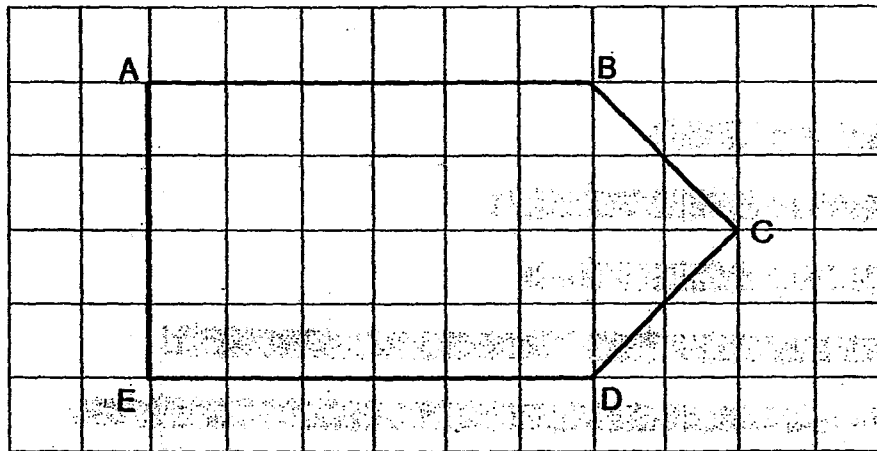
    (3)   3 090

    (4)   3 180

3. Which fraction is equivalent to $\frac{8}{12}$?

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

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

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

    (4) $\frac{3}{4}$

4. Aaron finished watching a concert at 2.45 p.m. The concert lasted 1 h 20 min. What time did the concert start?

    (1)   1.25 p.m.

    (2)   1.45 p.m.

    (3)   3.05 p.m.

    (4)   3.35 p.m.

5. The figure below is not drawn to scale. How many angles in the figure ABCDE are greater than right angles?

(1) 0.

(2) 2

(3) 3

(4) 5

6. Which of the following adds up to the greatest odd number?

(1) 900 + 80 + 4

(2) 800 + 90 + 4

(3) 800 + 40 + 9

(4) 400 + 80 + 9

7. Which letter below does not have perpendicular lines?

(1) A

(2) E

(3) F

(4) H

The bar graph below shows the types of sport that a group of pupils like.
Study the graph carefully and answer question 8.

Pupils' Favourite Sport

Number of Pupils
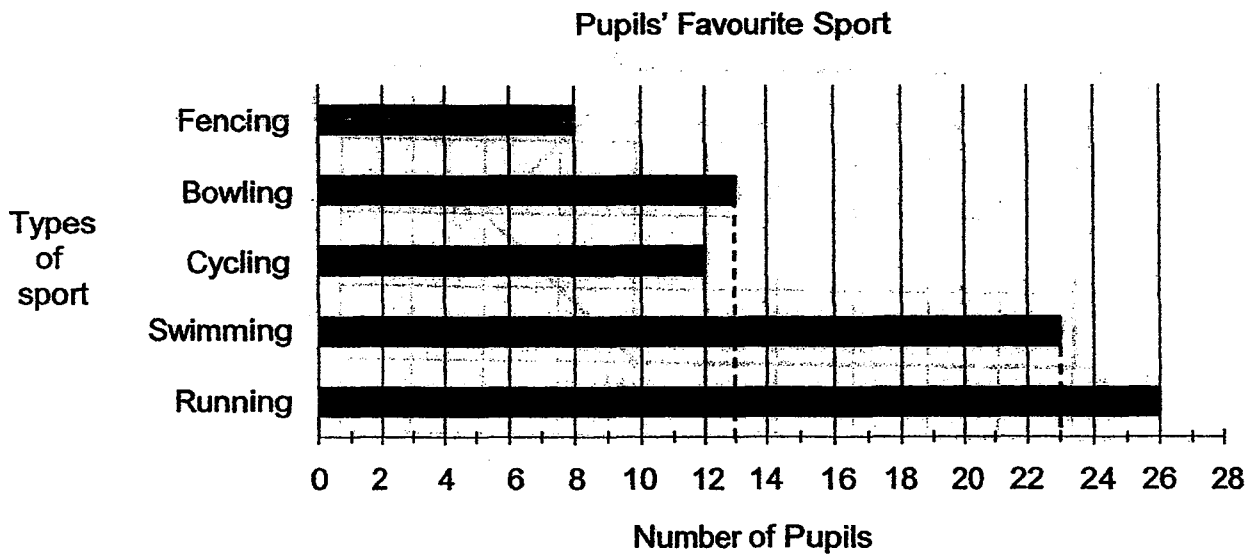
8. Which sport has twice as many pupils as Bowling?

    (1) Cycling
    (2) Fencing
    (3) Running
    (4) Swimming

9. Alex wants to buy a toy car and a scooter bike. The toy car costs $39.45 and the scooter bike costs $99.90. How much more does Alex need if he has only $100?

    (1) $239.35
    (2) $139.35
    (3) $60.55
    (4) $39.35

10. The shapes below are not drawn to scale.
    P is a rectangle and Q is a square. The 2 shapes have the same area.
    What is the length of rectangle P?
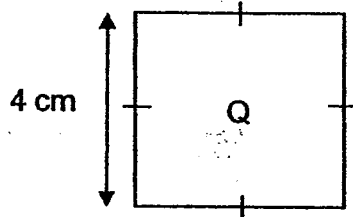
(1)   16 cm

(2)   8 cm

(3)   6 cm

(4)   4 cm

END-OF-YEAR EXAMINATION 2016
MATHEMATICS
BOOKLET B
PRIMARY THREE

Name: _____ (   )   Class: Primary 3 ___

Date: 27 October 2016   Duration of Booklets A & B: 1 hour 45 minutes

_____
Parent's/Guardian's signature

Section	Maximum Marks	Marks Obtained
A. Multiple-Choice Questions	20	
B. Short Answers	38	
C. Problem Sums	22	
Total Marks	80	

SECTION B - Short Answers (38 Marks)

Questions 11 to 20 carry 1 mark each. Questions 21 to 34 carry 2 marks each. Show all workings and mathematical statements clearly in the space below each question. Write your answer in the space provided. Express your answers in the units stated and in its simplest form whenever possible.

11. $\dfrac{4}{7} + \dfrac{2}{7} = \boxed{\ ?\ }$

Answer : _____
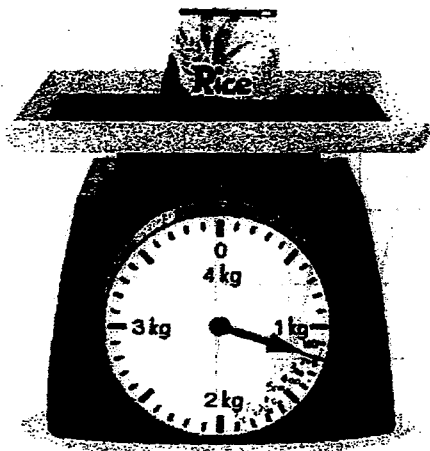
12. Express 2 h 50 min in minutes.

Answer : _____ min

13. Arrange the following fractions in descending order.

$$\dfrac{3}{7}, \quad \dfrac{3}{5}, \quad \dfrac{3}{11}$$

Answer : _____ , _____ , _____

greatest

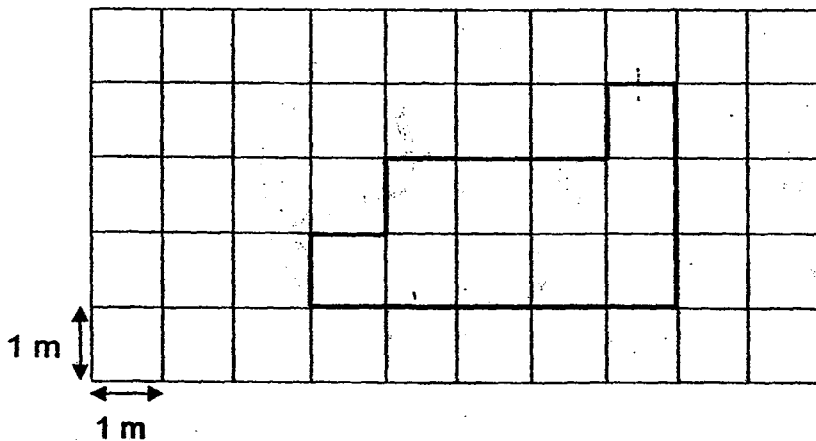14. What is the mass of the bag of rice?

Answer : _____ kg _____ g

15. $\dfrac{5}{8} - \dfrac{1}{4} = \boxed{?}$
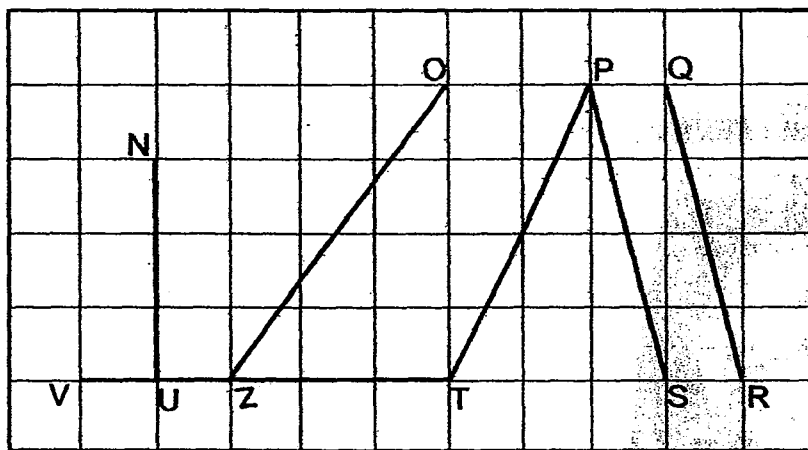
Answer : _____

16. The figure below, not drawn to scale, is made up of 1-m squares. Find its perimeter.

1 m

1 m

Answer : _____ m

Study the diagram below carefully and answer questions 17 and 18.

17. Name a vertical line.

Answer : _____

18. Name a pair of parallel lines.

Answer : _____ // _____

19. How many minutes are there from 11.41 p.m. to 12.18 a.m.?
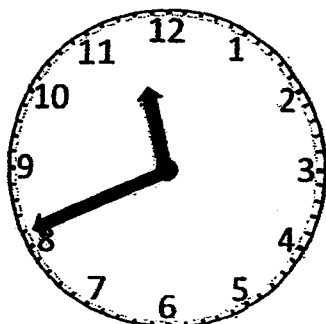
Answer : _____ min

The bar graph below shows the number of newspapers sold over a period of 5 days. Study the graph carefully and answer questions 20 and 21.

Number of Newspapers Sold Over 5 Days
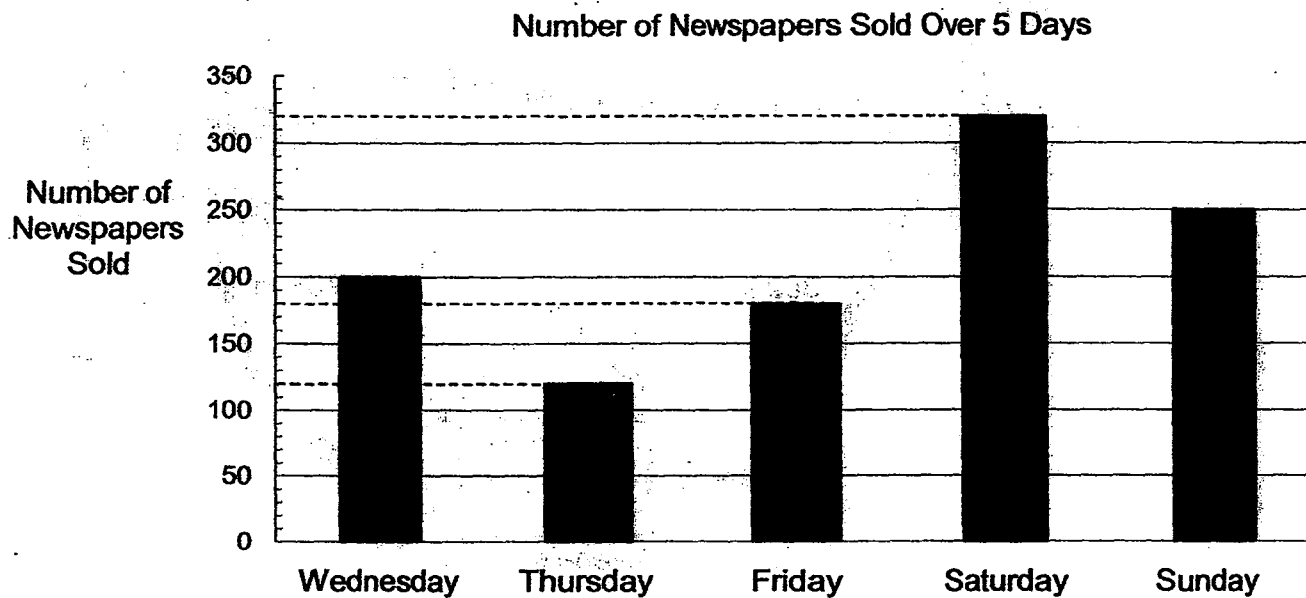
20. On which day was the least number of newspapers sold?

Answer : _____

21. How many more newspapers were sold on Sunday than on Friday?

Answer : _____

22. Look at the picture below. How much further is Serene's house to school than to church?

902 m

768 m

School

Church

Serene's house
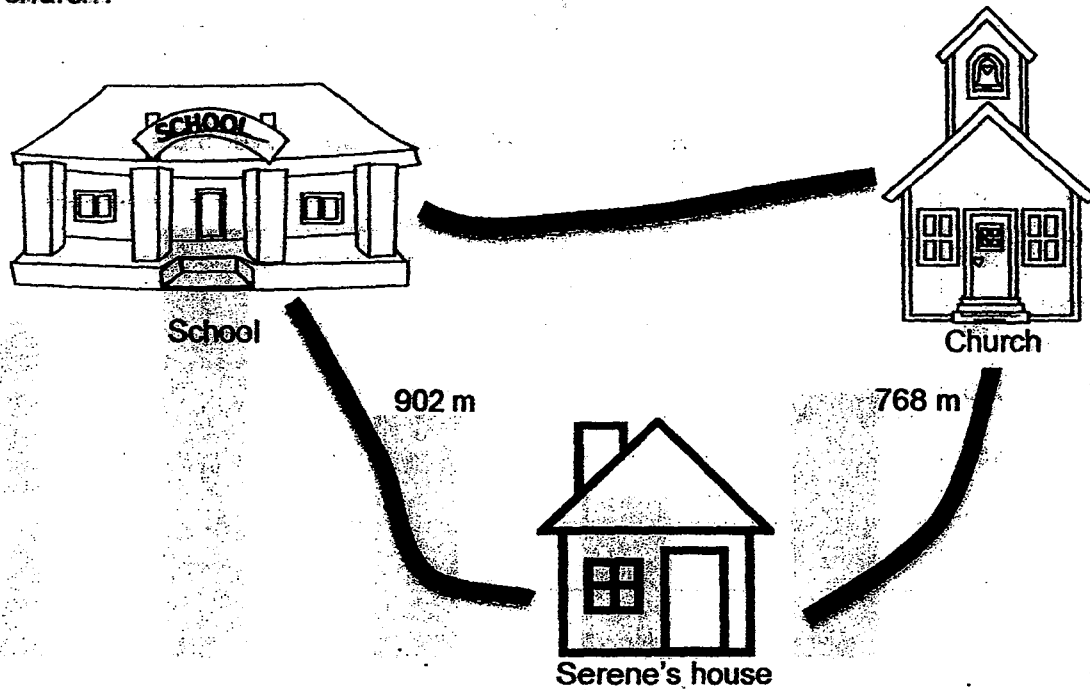
Answer : _____ m

23. There are 42 pupils in Primary 3G. During assembly, all the pupils sit equally in 6 rows. How many pupils are there in each row?

Answer : _____

24. Kylie had 4 ten-dollar notes and 3 two-dollar notes. After she bought a doll for $23.65, how much money had she left?

Answer : $ _____

25. What fraction of the figure below is **shaded**? Express your answer in the simplest form.
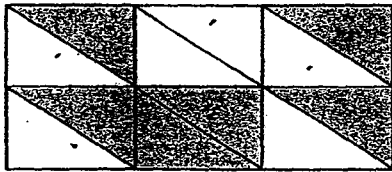
Answer : _____

26. What is the missing number in the box?

$$\frac{2}{6} = \frac{\boxed{?}}{9}$$

Answer : _____

27. Carol bought a carton of milk and a lollipop. The carton of milk costs $2.90. She paid the cashier $5 and received a change of $1.10. How much did the lollipop cost?

Answer : $ _____

28. The difference between two numbers is 185. The smaller number is 776. What is the bigger number?

Answer : _____

29. The breadth of a rectangular piece of paper is 6 cm. The length of the paper is 14 cm. What is the perimeter of the piece of paper?

14 cm

6 cm
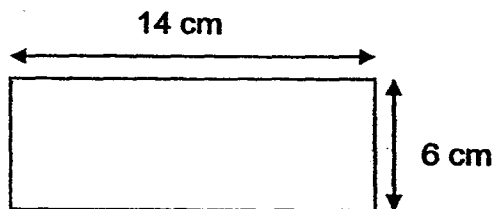
Answer : _____ cm

30. A tailor sews 7 buttons on each blouse. How many buttons does the tailor have if he has 2 buttons left after sewing 84 blouses?

Answer : _____

31. 378 rubber bands were shared equally among some children. If there were 9 children, how many rubber bands did each child receive?

Answer : _____

32. The figure below shows 2 straight lines JM and KL. Use a set-square to draw a line parallel to the 2 given lines.
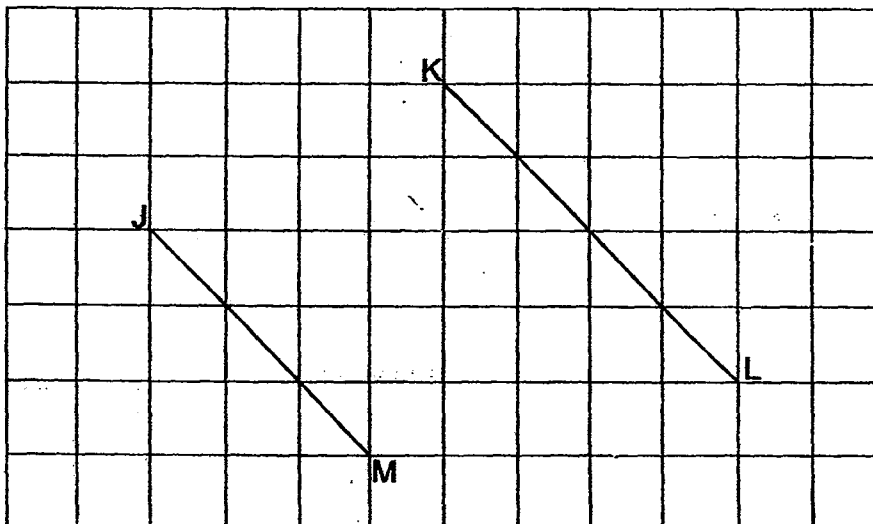
33. 500 g of flour is packed into 2 bags. One bag has 100 g more flour than the other bag. What is the mass of the lighter bag?

Answer : _____ g

34. Ian has 3 different shirts and 3 different pairs of shorts. In how many ways can he wear his shirts and shorts?

Answer : _____

Questions 35 to 36 carry 3 marks each. Questions 37 to 40 carry 4 marks each. Show your working and mathematical statements clearly in the space below each question. All figures are not drawn to scale. Write your answer in the answer space provided. Express your answers in the units stated and in its simplest form whenever possible.

35. Peter and Mark picked up a total of 150 cans. For every 3 cans that Peter picked up, Mark picked up 2 cans. How many did Peter pick up?

Answer: _____ [3]

36. A piece of rope is 100 cm long. It is cut into 2 pieces.
One piece is used to form a square. Each side of the square is 12 cm.
What is the length of the other piece?

12 cm
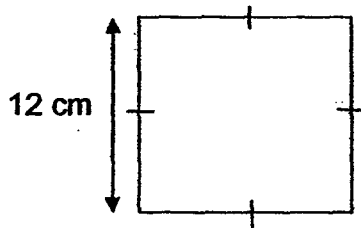
37. Ryan started working at 8.30 a.m. in the morning. He worked for 4 h 15 min before he went for his lunch.

(a) What time did he go for his lunch?

(b) He worked 1 h 55 min more after his lunch. How long did he work in total?

Answer: (a) _____ [2]

(b) _____ [2]

38. A farmer plucked 1 734 apples from his orchard. He packed 1 056 of the apples into boxes and gave the rest to his friends.

(a) How many apples did the farmer give to his friends?

(b) The farmer then packed 8 apples in a box. How many boxes of apples did he pack?

Answer: (a) _____ [2]

(b) _____ [2]

39. Brandon drinks 225 ml of milk in a day.
His baby brother drinks 8 times as much milk as him.
His sister drinks 75 ml less milk than Brandon.

(a) How much milk does Brandon's baby brother drink daily?

(b) How much milk does Brandon's sister drink daily?

Answer: (a)_____ [2]

(b) _____ [2]

40. Lawrence saved $5 in Week 1. He saved $10 in Week 2.
He saved $15 in Week 3. He continued saving in this pattern.
(You may make a table.)

(a) In which week did he save $30?

(b) How much would he save in Week 8?

Week	Total Amount of $ Saved

Answer: (a) _____ [2]

(b) _____ [2]

End-of-Paper

ANSWER KEY

YEAR   :   2016
LEVEL   :   PRIMARY 3
SCHOOL   :   ANGLO-CHINESE
SUBJECT   :   MATHEMATICS
TERM   :   SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	2	3	1	2	3	1	3	4	2

Booklet B

Q11 $\frac{6}{7}$

Q12   170 min

Q13 $\frac{3}{5}, \frac{3}{7}, \frac{3}{11}$

Q14   1 kg 200 g

Q15 $\frac{3}{8}$

Q16   16 m

Q17   QR

Q18   PS // QR

Q19   37 min

Q20   Thursday

Q21   250 − 180 ⇒ **70 more newspapers**

Q22   902 − 768 ⇒ **134 m**

Q23   42 ÷ 6 ⇒ **7 pupils**

Q24 $46.00 - $23.65 $\Rightarrow$ <u>$22.35</u>

Q25 $\dfrac{1}{2}$

Q26   3

Q27 $2.90 + $1.10 $\rightarrow$ $4.00
                $5.00 - $4.00 $\Rightarrow$ <u>$1 each lollipop</u>

Q28   776 + 185 $\Rightarrow$ <u>961</u>

Q29   14 x 2 = 28
                6 x 2 = 12
                28 + 12 $\Rightarrow$ <u>40 cm</u>

Q30   84 x 7 $\rightarrow$ 588
                588 + 2 $\Rightarrow$ <u>590 buttons</u>

Q31   378 ÷ 9 $\Rightarrow$ <u>42 rubber bands</u>

Q32
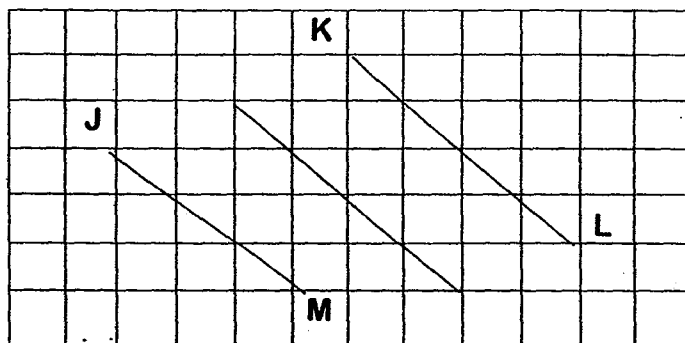
Q33   500 - 100 $\rightarrow$ 400
                400 ÷ 2 $\Rightarrow$ <u>200 g</u>

Q34   9 ways

Q35

Peter	Mark	Total
30	20	50
60	40	100
90	60	150

Answer $\Rightarrow$ Peter picked up <u>90 cans.</u>

Q36   12 x 4 $\rightarrow$ 48
                100 - 48 $\Rightarrow$ <u>52 cm</u>

Q37   **(a)**

$$\overbrace{8{:}30am \mid 8{:}45am}^{15\,min} \quad \overbrace{ \mid 12{:}45pm}^{4\,hour}$$

Answer ⇒ <u>12:45 pm</u>

(b)   4 h 15 min + 1 h 55 min ⇒ <u>6 h 10 min</u>

Q38   **(a)**   1734 - 1056 ⇒ <u>678 apples</u>

(b)   1056 ÷ 8 ⇒ <u>132 boxes</u>

Q39   **(a)**   225 x 8 ⇒ <u>1800 ml</u>

(b)   225 - 75 ⇒ <u>150 ml</u>

Q40   **(a)**   Answer ⇒ <u>Week 6</u>

Week	Total Amount of $ Saved
1	$5
2	$10
3	$15
4	$20
5	$25
6	$30
7	$35
8	$40
9	$45
10	$50
11	$55
12	$60

(b)   Answer ⇒ <u>$40</u>

End