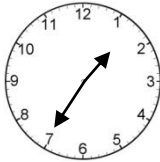


**ANSWER BOOKLET – MATHEMATICS FOR SEA STUDENTS
BY: MICHAEL GUERRA**

TEST 1

SECTION 1

- | | | |
|----------------------------|---|---------------------------------|
| 1. 3 | 2. 999 999 | 3. 7400 |
| 4. 200 | 5. $(2 \times 100) + (0 \times 10) + (3 \times 1) + (0 \times \frac{1}{10}) + (6 \times \frac{1}{100})$ | |
| 6. 0.02, 0.2, 2.0 and 20.0 | 7. 1.2 | 8. $960 \frac{7}{9}$ or 960 r 7 |
| 9. 1735 | 10. 1.1 | 11. Kilogram |
| 12. 648 centimetres | 13. 16 students | |



- | | | |
|------------|------------|--------|
| 14. | 15. Cuboid | 16. IV |
| 17. cuboid | 18. Keith | 19. 85 |
| 20. Red | | |

SECTION 2

- | | | |
|-----------------|----------|------------|
| 21. 840 persons | 22. 4877 | 23. \$5.00 |
| 24. 36 pizzas | | |

Either : You can find the number of children who shared 1 pizza them divide 288 by the number . e.g. 24 children = 3 pizzas

$$1 \text{ child} = \frac{3}{24} \text{ pizza}$$

$$\therefore 288 \text{ children} = \frac{3}{24} \times \frac{288}{1} = 36 \text{ pizzas}$$

Or : $288 \div 24 = 12$ groups of 24 children
then $12 \times 3 = 36$ pizzas

- | | |
|------------------------|---|
| 25. 3816 tomato plants | 26. $\frac{2 \times 2 \times 3 \times 3}{2 \times 3} = 6$ |
|------------------------|---|

- | | |
|--------------------------------------|------------|
| 27. $\frac{12}{20}$ or $\frac{3}{5}$ | 28. \$440. |
|--------------------------------------|------------|

29. ASAW

- | | |
|--|---|
| 30. 2 mangoes at \$2.75 each = \$ 5.50 | Change from \$100.00 = \$100.00 - \$27.75
= \$ 72.25 |
| 6 plums at \$2.25 each = \$ 13.50 | |
| 5 mangoes at \$1.75 each = \$ 8.75 | |
| Total bill <u>\$ 27.75</u> | |

31. Y = 25cm X = 23cm
32. 4:40p.m. or 20 minutes to five
33. (i) 72 000cm³

(ii) To find the capacity of the tank, you divide 72 000cm³ by 1000cm³. 1000cm³= 1 litre

Capacity is the number of litres the tank can hold. 72 litres.

34. 20 weights

35. C and D / triangular based prism and the cylinder.

36.

Name of Shape	Number of Sides	Number of Right Angles
Square	4	<u>4</u>
Trapezium	4	2
Hexagon	<u>6</u>	0

37. The square has all sides equal. When folded, you will get 4 lines of symmetry. The rectangle has only opposite sides equal. When folded, you will get 2 lines of symmetry.

38. 12 vehicles



39.

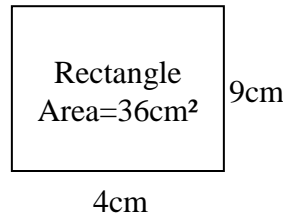
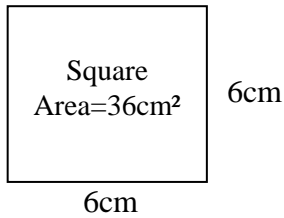
40. (i) 67, Total 312 (ii) 78%

SECTION 3

41. 15 heads of lettuce

42. (i) 500 cookies (ii) \$450.00

43. (i)

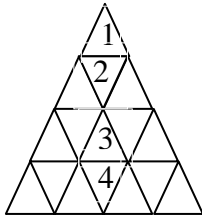


(ii) 36cm^2 and

36cm^2

44.

45. (i) 5cm each week (ii) 25cm



16

TEST 2

SECTION 1

1.

4	5	8	0	6	4
---	---	---	---	---	---

2. 146 484

3. Different because of positional value. The digit 6 in A = 6 000 and the digit 6 is B = 60.
Difference = 5 940

4. $\frac{30}{8}$

5. 235%

6. 28 fifths

7. 216 plums

8. 430 hundredths

9. 1.2

10. \$70:50

11. Centimetres (cm)

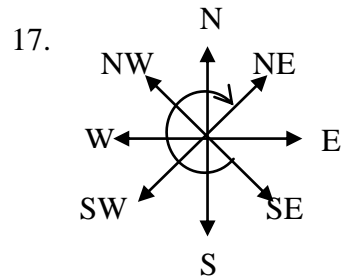
12. 1hr 45mins or $1\frac{3}{4}$ hours

13. 9 full 1 litre bottles

14. 12 plantains

15. Hexagon

16. A cuboid above has 6 rectangular faces, opposite faces are equal.
A cube has 6 equal square faces.



18. Bus

19. 375

20. 80 marks

SECTION 2

21. 536 marbles

22. 99

23. 864 pens packed in boxes of 16 = $264 \div 16 = 54$ boxes

864 pens packed in boxes of 24 = $864 \div 24 = 36$ boxes

Difference = 18 boxes more are needed when packed in boxes of 16 than boxes of 24

24. $1\frac{11}{25}$

25. $\frac{5}{12}$

26. \$ 1 600.00

27. No. Both vendors are selling at the same price 1 egg = \$1.25

28. \$1 035.00

29. (i) 82%

(ii) To find the remainder = $500 - 350 = 150$

then 40% of 150 = 60

\therefore he sold 60 chickens to the restaurant.

30. Student 2. This student understood the meaning of 'difference between' and subtracted. Student 1 added.

31. 18cm^2

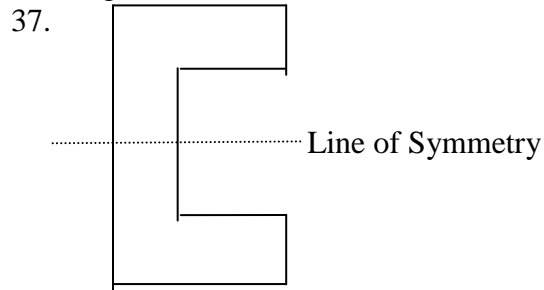
32. 340cm^2

33. 100cm^2

34. \$2400.00

35. (a) Rectangular based pyramid (b) 2 equal pairs

36. Edges 1 Vertices 1 Faces 2



38. (i) For the months of January, February, April and June, there is a rise in sales of at least \$5000. But in the months of March and May there is a fall in sales of exactly \$5000.

(ii) July - \$5000

39. 105 40.144 students

SECTION 3

41. Ricardo.

Josh only multiplied his divisor by 10. ($0.5 \times 10 = 5$) and divided 2.25 by $5 = 0.45$

Ricardo however multiplied both divisor and dividend by 10 ($2.25 \times 10 = 22.5$ and $0.5 \times 10 = 5$) and divided $22.5 \div 5 = 4.5$

42. 9 - \$100, 1 - \$50, 1 - \$20, 2 - \$10, 1 - \$5 and 2 - \$1

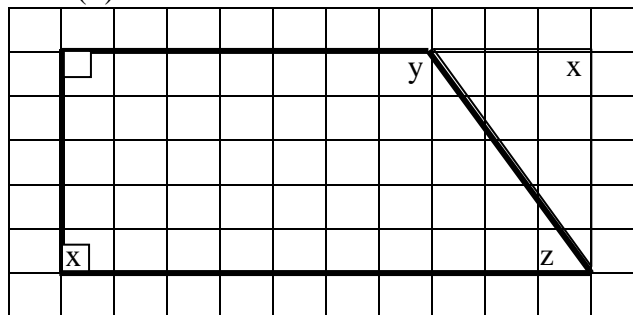
$9 \times 100 = \$900$	
$1 \times 50 = \$ 50$	Problem solving skill: Trial and Error
$1 \times 20 = \$ 20$	
$2 \times 10 = \$ 20$	
$1 \times 5 = \$ 5$	
<u>$2 \times 1 = \\$ 2$</u>	
Total <u>16</u>	<u>\$997</u>

43. 576 wooden boxes

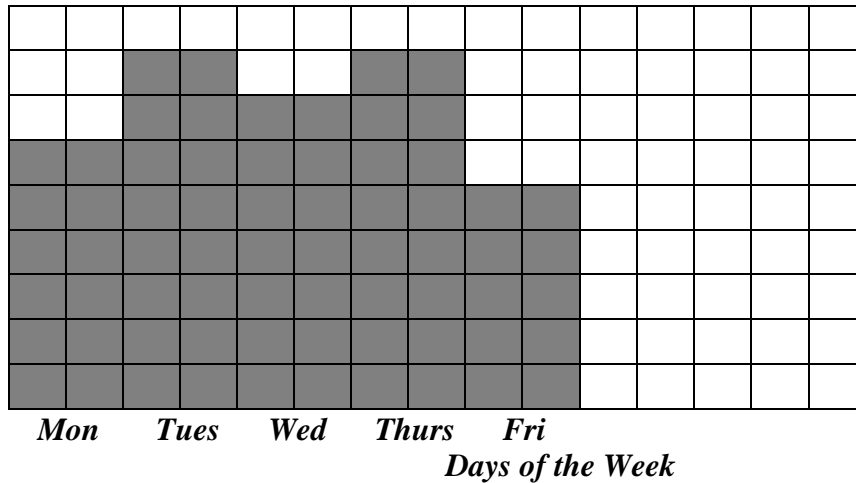
44. (i) trapezium

(ii)

(iii) Rectangle



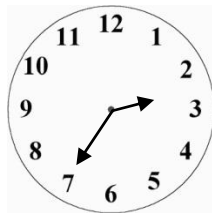
45.



TEST 3

SECTION 1

- | | | |
|---|----------------|-----------|
| 1. 36048 | 2. 6531 | |
| 3. Seven hundred and sixty-one thousand and fifty-three | | |
| 4. 120 marbles | 5. 9000 | 6. 1735 |
| 7. $\frac{14}{3}$ | 8. 14 tenths | 9. 9% |
| 10. 0.35 | 11. 140 000 cm | 12. 1.2kg |



- | | | |
|----------------|----------------------------|--------------|
| 13. 16 glasses | 14. | 15. Cylinder |
| 16. D | 17. Triangular based prism | 18. 64 |
| 19. 44 | 20. 2005 | |

SECTION 2

- | | |
|---|------------|
| 21. 5.71 | 22. 61 |
| 23. Store 2 | |
| 10% off \$650 = \$ 65 Selling Price = \$585. | |
| 15% off \$680 = \$102 Selling Price = \$578. | |
| 24. \$75.00 | 25. 3 bags |
| 26. Daughter: \$460 Son: \$ 380 | |
| Unequal sharing. Remove the \$80 from the \$840. Divided the remainder by 2, then add \$80 to one of the share. Which gives \$460 – daughter and son - \$ 380 | |

27. \$7.20

28. Good estimating skills.

Mia rounded each item cost to the nearest dollars, which added to \$9.00. She then made the decision 'about \$10' would cover the cost of the fruits.

29. $4\frac{5}{7}$

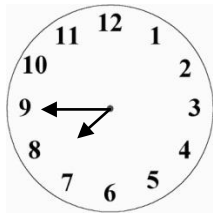
30. Student 1

Their answers are opposite (the reciprocal) to each other. If multiplied will give 1. (Any number multiplied by its reciprocal equals one (i)).

31. He has to divide the 40cm strips into 4 equal pieces 10cm in length, because a square has 4 equal sides. Area = Side \times Side $\rightarrow 10\text{cm} \times 10\text{cm} = 100\text{cm}^2$

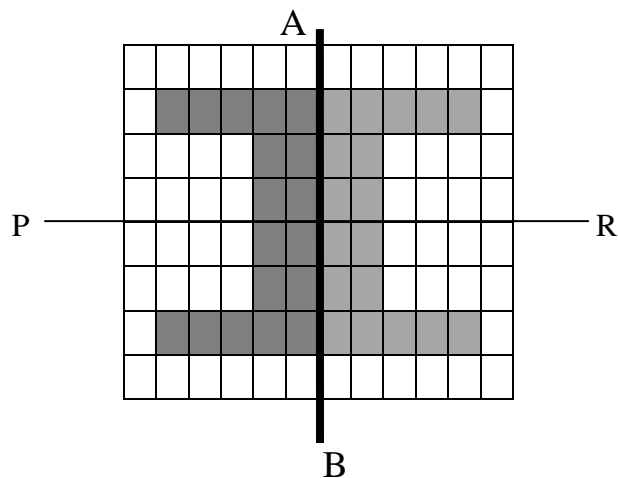
32. 57.00cm^2

33. Parcel 2 and 765g



34.

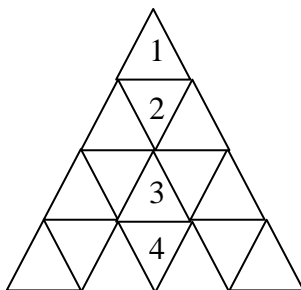
35.



36. The square has 4 equal sides.

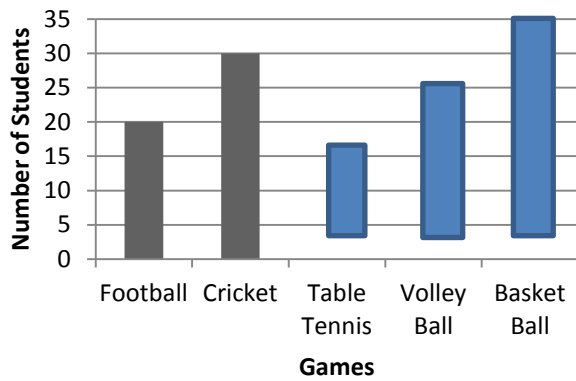
The rectangle has 4 sides with opposite sides equal unlike the square.

37.



38. 18 students

39. 44 runs



40.

SECTION 3

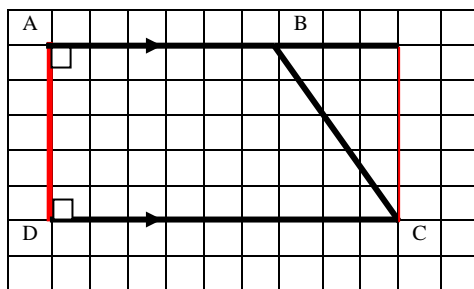
41. Student 1

Student 1 rounded upwards, while student 2 rounded downwards. Rounding upwards whenever the remainder is $\frac{1}{2}$ or more than $\frac{1}{2}$ is correct.

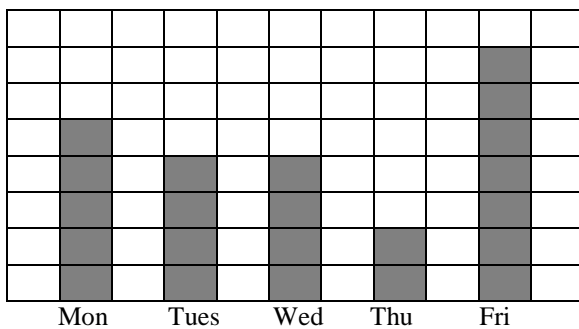
42. \$72

43. Answer = 11 rolls of wire. Harry calculated the perimeter of the fence around his home, then, he divided it by the length of the wire. Width of wire is not necessary here.

44.



45. a.



b. Thursday

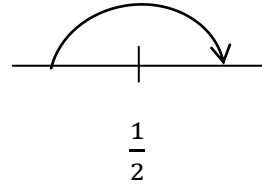
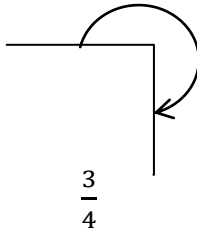
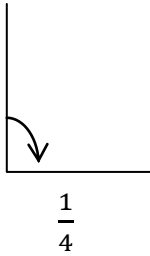
c. Tuesday and Wednesday

TEST 4

SECTION 1

- 1. digit 4
- 2. $(1 \times 1\,000\,000) + (5 \times 100\,000) + (6 \times 10\,000) + (4 \times 100) + (3 \times 10) + (6 \times 1)$
- 3. 634 tens
- 4. 468
- 5. 0.15
- 6. 5752
- 7. 8 and 24
- 8. $A = 16, B = 9$
- 9. $\frac{2}{9}$
- 10. Yes. $40 - 25\text{¢ pieces} \times 10 = 400$ twenty-five cents pieces
- 11. 10cm
- 12. 45 minutes
- 13. 8 smaller bags
- 14. $10\,500\text{cm}^3$
- 15.

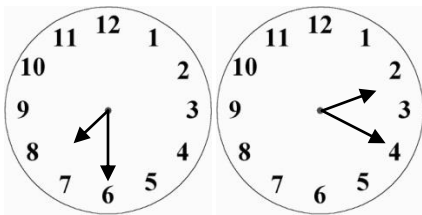
- 16. Zero (0)
- 17.



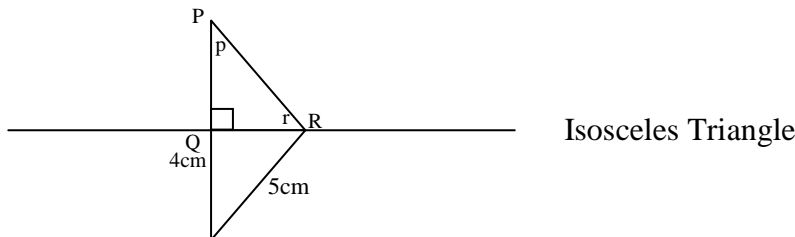
- 18. Private car
- 19. 74 students
- 20. 20 students

SECTION 2

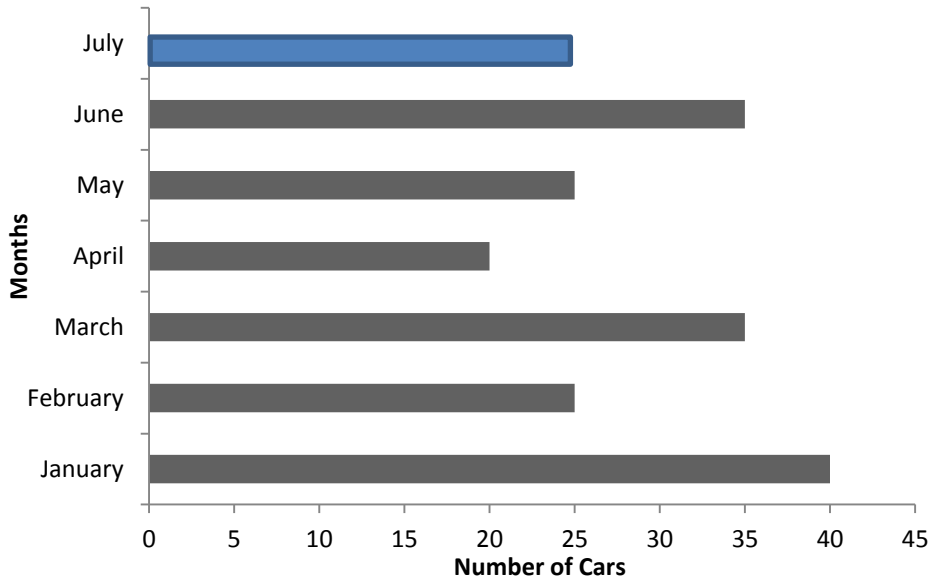
- 21. $2\frac{13}{16}$
- 22. 425 cookies
- 23. 1440 eggs
- 24. a. \$800 b. \$100
- 25. $7\frac{1}{2}$ dozen eggs
- 26. (i) 4 children (ii) 0.25
- 27. \$1800
- 28. a. \$2160 b. \$24480 c. \$680
- 29. \$150
- 30. 630 persons



- 31. a.
- b. 6 hours 50 minutes
- 32. 4800cm^3
- 33. 240 000 litres
- 34. 80 small blocks
- 35. 8 triangles
- 36. Square
- 37.



38. a. 180 cars



b.

39. a. Mortgage = \$3000.
 b. Car Loan = \$3000.
 c. Savings = \$3000.
 d. Family Allowances = \$3000.

40. 94 cm

SECTION 3

41. He is correct in his estimation, after his distribution of the bottles of juice to the students, there will be 14 extra bottles of juice.

42. Answer: John

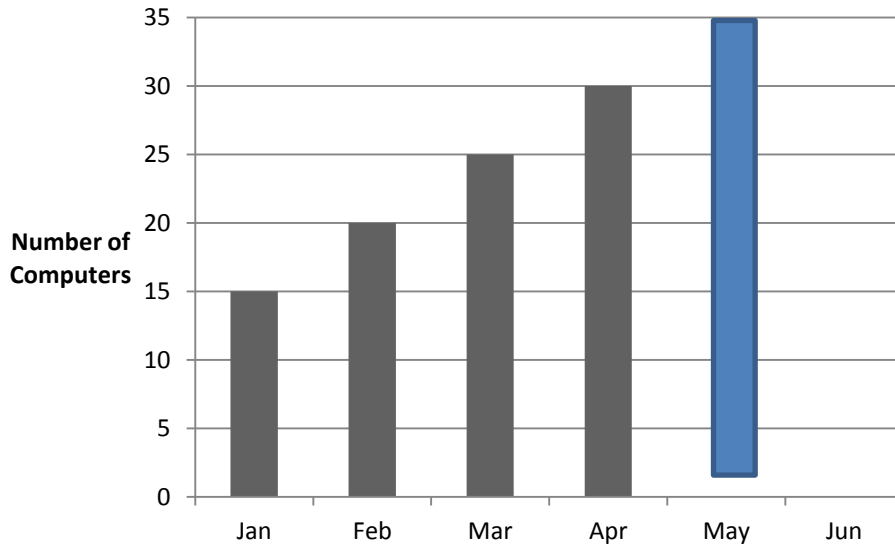
- (i) 144 marbles divided by 8 boys = 18 marbles each
 144 marbles divided by 6 boys = 24 marbles each
 (ii) 20 marbles

43. a. 12 litres b. 2000cm³

44.

Shape 2d	Solid 3d	Name of Solid
		cuboid
		cube

45. a.

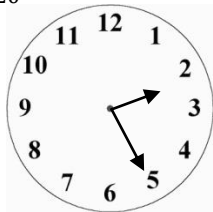


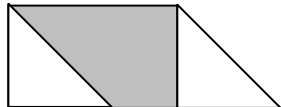
- a. 5 computers
- b. There is an increase of 5 computers sold for each month from January to April. Constant increase.
- c. 35 computers

TEST 5

SECTION 1


1. Seven hundred and sixty one thousand and fifty three.
2. 03567
3. Multiples of 2 = 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30
 Multiples of 3 = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39,
 Ans = 6, 12, 18, 24
4. 2
5. 5¢, 10¢ 1¢
6. $x = 3$
7. 545.05
8. 2.0
9. $\frac{7}{20}$
10. 40%
11. 5.084 kilometres



12. p.m.
13. $120\,000\text{cm}^3 = 120$ litres
14. Gold
15. B and D
16. 2 square faces
17. 
18. 91 marks
19. 29 degrees

20. 8 students

SECTION 2

21. Because 18 is a multiple of 2 and 3. Also 2 and 3 are factors of 18.
 22. 12 dresses
 23. 120
 24. a. 35 – 25cent pieces b. \$12.50
 25. $1\frac{1}{6}$
 26. $\frac{13}{8}$, $\frac{21}{8}$
 27. 1250
 28. \$189
 29. 0.4
 30. 180 boys
 31. 30cm²
 32. \$3200
 33. 290 cm²
 34. 102.5 km
 35. 
 36. Rectangle
 37. a. Equilateral triangle b. 5 equal triangles
 38. 79
 39. (i) 5 points (ii) 135 points
 40.

Sports Equipment	Money Spent (Dollars)							
Footballs	■	■	■	■	■	■	■	
Cricket bats and balls	■	■	■	■	■	■	■	
Netballs	■	■	■	■	■			
Basketballs	■	■	■	■	■	■	■	

SECTION 3

41. Problem 1 asked for the number of students: 7 remainder 4. There can be no fraction of a student alive.
 Problem 2 asked for the number of cupcakes each student received: 7 ½ cupcakes
 42. (i) 305 pupils and teachers (ii) \$21 975.
 43. $\frac{5}{6}$ litres of oil
 44. (i) triangular based prism
 (ii)



45. (i) $12 \times 4 = 48$
 $15 \times 6 = 90$
 $18 \times 10 = 180$
 $21 \times 9 = 189$
 $24 \times 6 = 144$
 $25 \times 5 = 125$
 Total = 776

(ii) 19 marks

TEST 6

SECTION 1

1. 6799, 7699, 9766, 9976

2. \$2 002.02

3. 2, 3 and 5

4. $\frac{1}{36}$

$$\begin{array}{r} 245 \\ 15 \overline{) 3675} \\ \underline{- 30} \\ 67 \\ \underline{- 60} \\ 75 \\ \underline{- 75} \\ 00 \end{array}$$

6. $\frac{4}{5}$

7. Positional Value - tenths

8. 80

9. 5 pizzas

10. 3 packs

11. 6040 metres

12. 250 ml Cost \$4.75

13. \$1200

14. 6.05 kilograms

15. Cylinder

16. Circle and Rectangle

17. Equilateral triangle

18. March and April

19. \$25 000

20. Ochro

SECTION 2

21. 0.8 and 0.4

22. 204 cookies

23. 2

24. $2 \times 6 - 4 = 8$
 $2 \times 8 - 4 = 12$

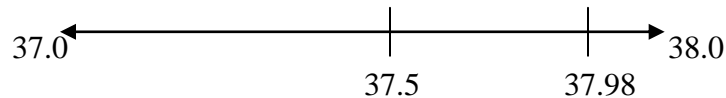
25. a. Ravi's age 29 years
Father's age 57 years
b. 28 years

26. 13

27. $1\frac{11}{28}$

28. 4.26

29. Mary's approximation is correct. She rounded 0.98 upwards to the nearest whole number, because it is greater than 0.50.



30. 18%

31. 9:10 a.m.

32. 132m²

33. a. 189kg b. 42kg

34. a. 80 packages b. \$1000.00

35. a. D

b. When the parallel lines are extended they remain equidistant apart. Unlike perpendicular lines, these lines meet or intersect at right angles.

36. $2\frac{1}{4}$ turns

37. (i) c and d (ii) a and b

38. a. Betty and Chin b. 30 marks c. About 80 marks

39. (i)

Number of books	Number of Students	Total Number of Books
1	2	2
2	3	6
3	5	15
4	6	24
5	7	35
6	4	24
7	3	21

(ii) 127 books

(iii) 14 students

40. (i) 5 books

(ii) 4 books

SECTION 3

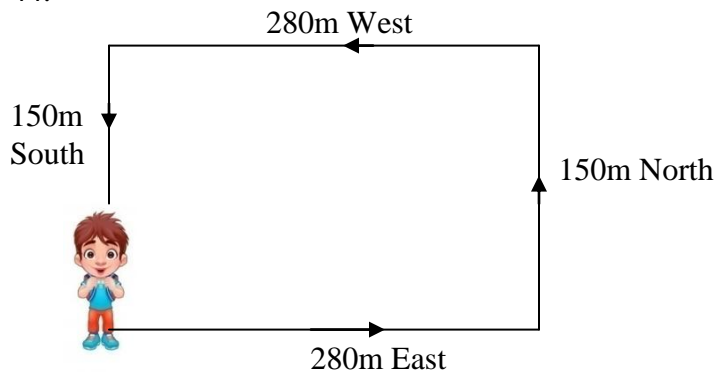
41. (i) \$110.00 (ii) \$11.00 (iii) \$121.00

42. a. $\frac{1}{5}$ b. $\frac{2}{5}$ c. \$125.00

43. a. Shapes B and C

b. Perpendicular lines intersect at right angles. Parallel lines do not intersect when extended. There lines remain equidistant apart.

44.

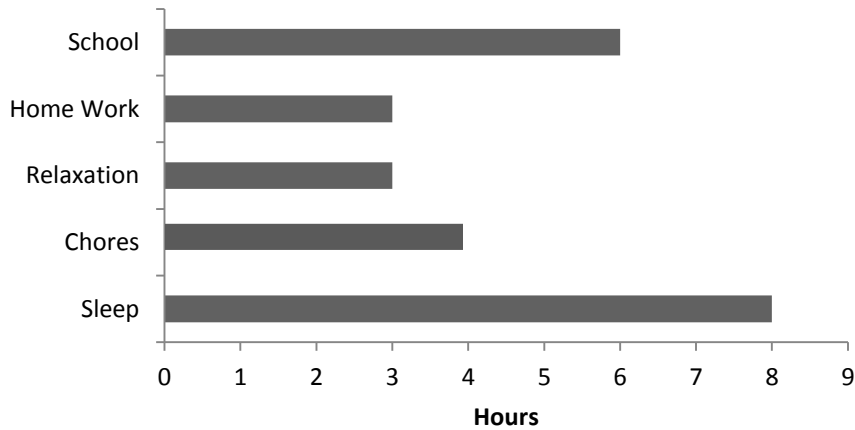


b. Rectangle

c. 3 - $\frac{1}{4}$ turns

d. 2 lines of symmetry

45.



b. 25%

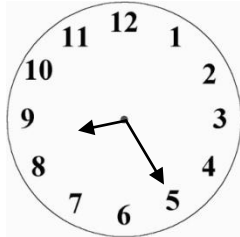
Assignments	School	Home Work	Relaxation	Chores	Sleep
Hours	6	3	3	4	8

c.

TEST 7

SECTION 1

1. 3037
2. 24
3. $(3 \times 100\,000) + (0 \times 10\,000) + (7 \times 1\,000) + (0 \times 100) + (4 \times 10) + (0 \times 1)$
4. 10
5. 269
6. $\frac{1}{3}$
7. 555.5
8. \$120.00
9. <
10. \$78.
11. 15cm
12. \$57
13. 5 000cm³

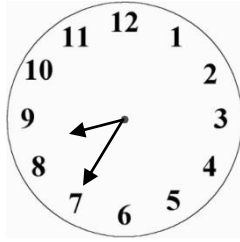


- 14.
15. 4 turns
16. B
17. 1 line
18. 12 cm
19. 13 cm
20. 27

SECTION 2

21. $\frac{5}{6}$ and $\frac{2}{3}$
22. 6²
23. 85
24. $\frac{45}{10}$
25. \$4 072.50
26. 15 dozen marbles

27. \$1 000
 28. 22
 29. a. 9762 b. 2796 c. 7966
 30. a. \$140.00 b. \$60.00



31. (a) (b) a.m. 32. 12:30 p.m.

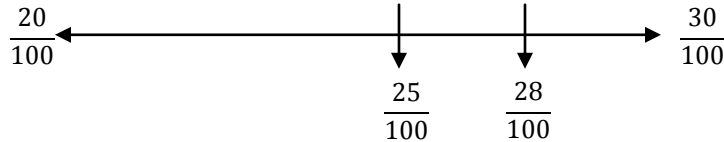
33. a. $21\frac{1}{3}$ cm b. 16cm

34. 21.3cm^2

Exact answer = 21.28cm^2

0.28 or $\frac{28}{100}$ is nearer in position to $\frac{30}{100}$ than $\frac{20}{100}$, therefore you approximate upwards to $\frac{30}{100}$ or

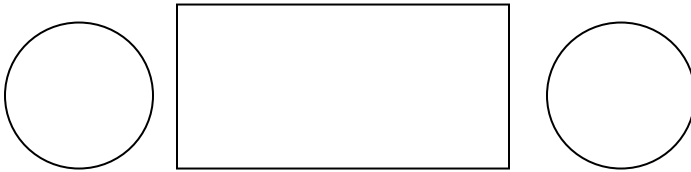
0.3 . e.g.



35. a. symmetrical line

b. A symmetrical line divides the shape into 2 equal and exact parts. When the shape is folded along a symmetrical line, the folded parts fit exactly on each other.

36. parallelogram square rhombus



- 37.

38. (i) 50 marks

(ii) Student's means varied because some students drop the score "00" and divided the total by 5, while the others divided the total by the correct number 6.

39. (i) 210 students (ii) 70 lunches (iii) \$4 200.

40. 66

SECTION 3

41. (i) None

$$6.4 \times 10 = 64$$

$$1.0 \times 10 = 10$$

$$64 \div 10 = 6\frac{4}{10} \text{ or } 6.4$$

$$\text{then } 6.4 \div 1.0 = 6.4$$

Any number divided by 1 the quotient is the number.

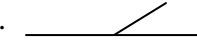
- (ii) Student 1 multiplied 6.4 by 0.1 = 0.64

Student 2 multiplied 6.4 by 10 and left the divisor as 1 = 64.0

42. a. \$6 000 b. \$1 500 c. \$13 500

43. (i) $x = 41\text{cm}$ $y = 36\text{cm}$ (ii) 154cm (iii) 324cm^2

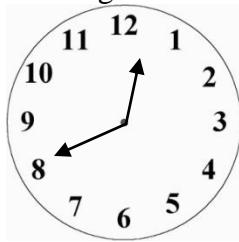
a \ b \ c

44. a. scalene b. angle b c. 0 line d.  a+b+c= ½ turn
 45. a. Total 500 380 b. 76% c. 76 marks d. 70 marks

TEST 8

SECTION 1

1. 101 303 2. 603 tens 3. 1287 animals
 4. $x = 5$ 5. $\frac{8}{40}$ 6. $\frac{2}{3}$
 7. 80% 8. 160 9. 45
 10. \$400 11. 72 litres 12. 7 weights
 13. 11.82 kg



14. 15. 2 flat faces 16. Sphere
 17. C 18. 23 19. 160 students

20.

Favourite Food	Number of Students
Pelau	15
Roti	35
Chicken and Chips	40
Fried Rice and Chicken	30
Barbecue	40

SECTION 2

21. 60 teachers 22. 160 buttons
 23. (i) 100% (ii) 62.5% or 62 ½ % (iii) 37.5% or 35 ½ %
 24. 35 32 67
 25. Different: Dividing the oranges into 2 equal groups = 5 oranges in a group.
 Dividing the oranges into groups of 2 equal groups = 5 groups of twos
 Answer One, the unit is orange. Answer Two, the unit is groups of twos
 26. (i) \$600 (ii) 20%
 27. 7
 28. Both processes are valid.
 Process 1 used Common fraction and then converted the answer to decimal.
 Process 2 used decimals. Multiplied both dividend and divisor by 10, then divided.
 29. \$30.00 30. \$12.50 31. 28 cm
 32. a. \$3 200 b. \$960 33. P= \$3.60 R = \$9.60 X= \$30.80

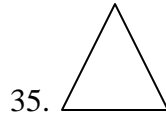
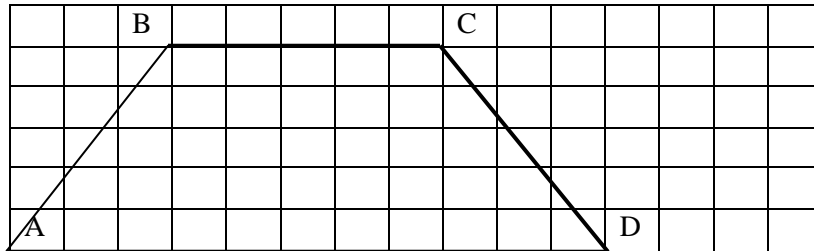
34. 4 days

36. a. Line 2 and Line 3

b. Line 1 and 2, Line 1 and 3

c. Line 1

37.



38. a. 20 kg b. 49kg

39. a. 8.2 marks b. 2 singers

40. 60 applicants

SECTION 3

41. (i) \$52.20

(ii) \$1.20 stamps = 2 \$1.00 stamps = 3

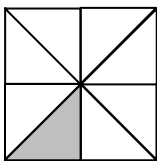
42. (i) \$90

(ii) \$ 260

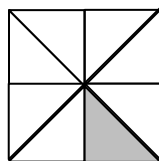
43. (i) 2040 litres

(ii) 2 040 000 cm³ (iii) 17 litres

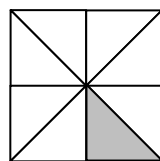
44.



6th



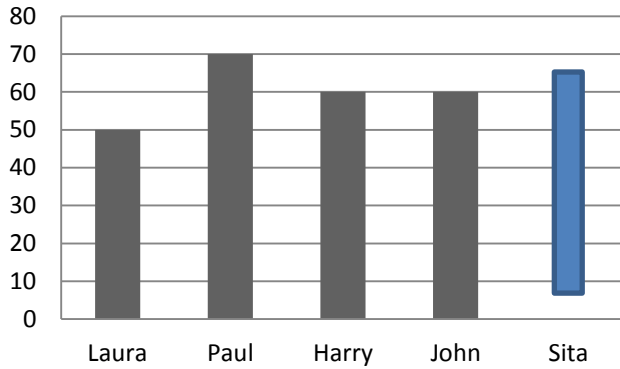
7th



8th

Skip 1 from the 1st, to get the 2nd, then 2 to get the 3rd, then 3 to get the 4th, then 4 to get the 5th, then 5 to get the 6th, then 6 to get the 7th, then 7 to get the 8th.

Chart Title



45. a.

b. 61 cm

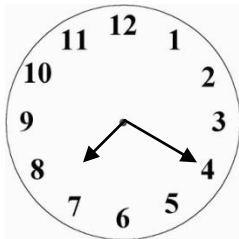
TEST 9

SECTION 1

- | | | |
|--|--------------------------|-----------------|
| 1. B | 2. Tens of thousand | |
| 3. 2, 3, 5, 7, 11, 13, 19, 23 and 29 | | |
| 4. $\frac{3}{8}$ | 5. 1365 | 6. 80% |
| 7. $\frac{27}{32}$ | 8. 2 | 9. \$162.50 |
| 10. $\frac{1}{2}, \frac{1}{3}, \frac{1}{6}, \frac{1}{9}$ | 11. 4 small packs | 12. 24 children |
| 13. 40 minutes | 14. 14 cm | 15. 1 line |
| 16. South | 17. Similar | 18. 360cm |
| 19. Bingo | 20. Nintendo and Pac Man | |

SECTION 2

- | | | |
|-------------------------------|------------|--------------------------------|
| 21. 125 defective cell phones | 22. 60% | 23. 6.0 |
| 24. 0.9 | 25. 20% | 26. \$590 |
| 27. 155.0 | 28. 20% | 29. 2 $\frac{1}{4}$ dozen eggs |
| 30. 22 | 31. Park A | |



- | | | |
|---------|---------------------|------------------|
| 32. | 33. (i) 22 children | (ii) 44 biscuits |
| 34. 4.1 | 35. 8 triangles | 36. B |

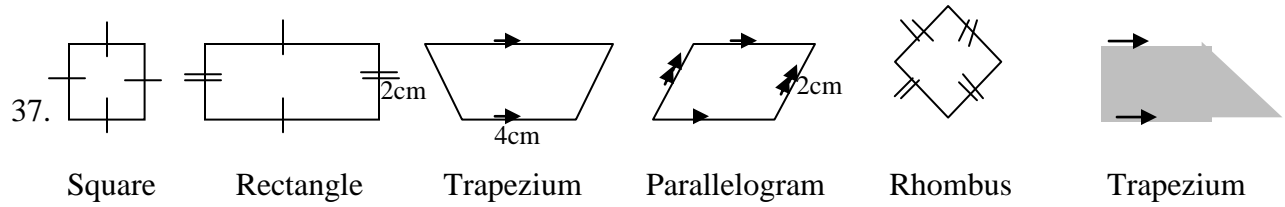
2cm

3cm

3cm

3cm

3cm



38. 21 cm
 39. 16 students
40. 1. They are physically and mentally more developed
 2. They can understand instructions given quite easily.
 3. More receptive to the vigors of training.
 4. More discipline etc.

SECTION 3

41. (i) 14 monthly payments (ii) 12 ½ % or 12.5%
42. 50 citrus fruits
43. Land Line: Monthly Rental Fee = \$ 45.00
 65 minutes x 15cents = \$ 9.75
 TOTAL \$ 54.75

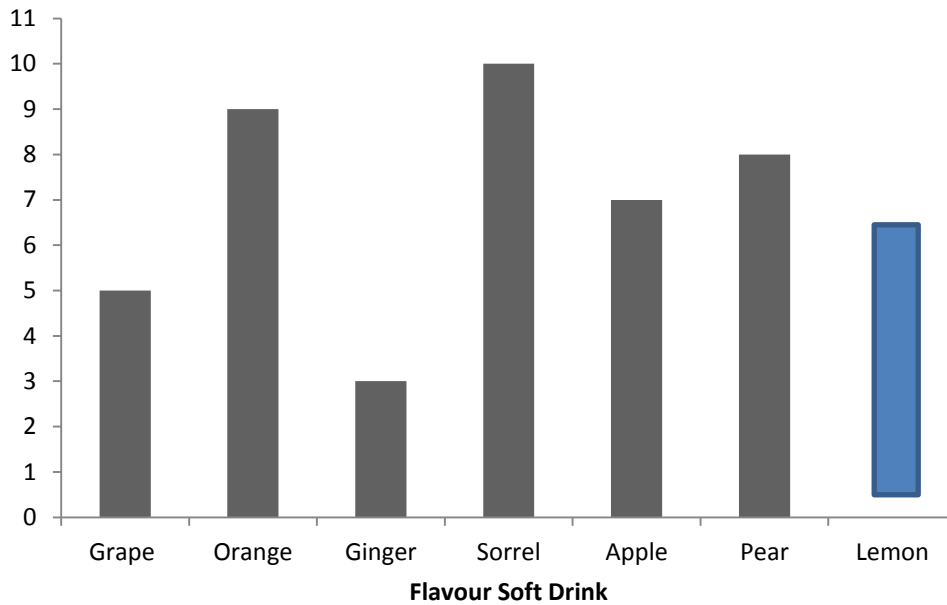
Cell Phone: 65 minutes x 90 cents = \$ 58.50
 Difference \$58.50 - \$54.75 = \$3.75

Land Line is cheaper by \$ 3.75

44. Hexagonal based Right-angled triangular based
 Equilateral triangular based Cylinder
 Cuboid

45. a. 42 students b. sorrel

c.



c.

TEST 10

SECTION 1

1.

Millions	Hundreds of Thousands	Tens of Thousand	Thousands	Hundreds	Tens	Ones
		3	0	5	0	1

2. 144

3. 2 568

4. 164 buttons

5. 45

6. $3\frac{3}{6}$ or $3\frac{1}{2}$

7. $2\frac{11}{20}$

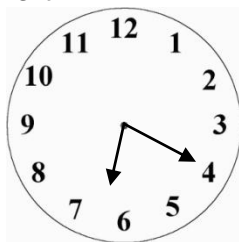
8. \$42.50

9. 1100

10. 11 pages

11. 15 cm

12. 460 000 milligrams



13.

14. 16cm^2

15. $4 - \frac{1}{4}$ turns

16. Because the cross-section is not uniform (same). The cone ends at the Apex (point).

17. cuboid

18. 1cm : 2 marbles

19. 24 marbles

20. 19 marbles

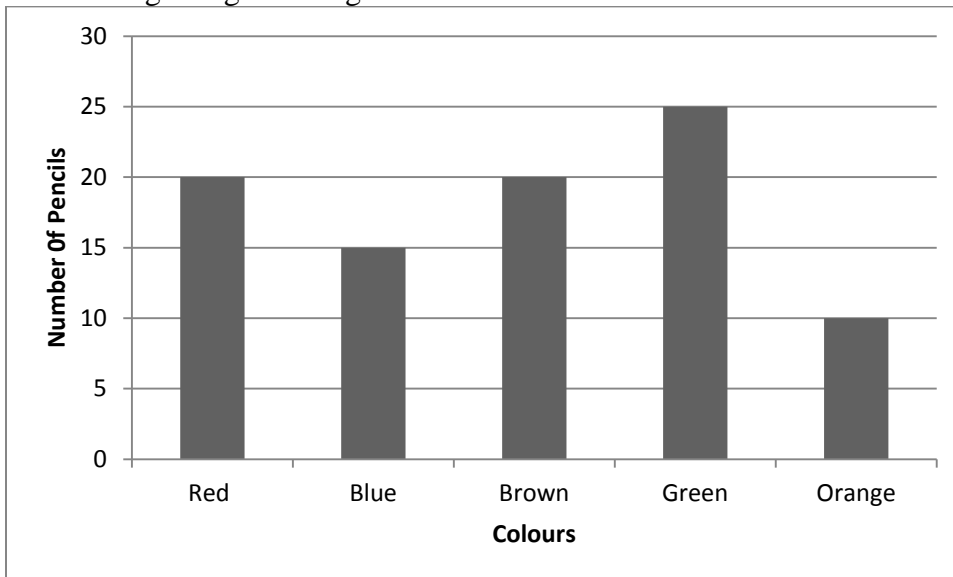
SECTION 2

21. $\frac{5}{6}$ 22. $3\frac{1}{2}$ 23. \$1 440.
 24. 18 broken bottles 25. 244 plates 26. 12 weeks

27.

Items	Quality	Unit Price	Total Cost (\$)
Sugar	3 ½ kg	\$ 6.50	a. \$ 22.75
Potatoes	3 bags	b. \$24.75	\$ 74.25
Total			\$ 97.00
Vat c. 10 %			\$ 9.70
TOTAL			\$106.70

28. \$120 29. \$125 30. \$320
 31. 8:30 a.m. 32. 24.64 litres 33. 300cm
 34. 2 – 2kg, 2 – 1 kg, 2 – ½ kg 35. Faces =5 Edges= 9
 36. Isosceles right angled triangle 37. 1 line 38. Green



39.
 40. 72 marks

SECTION 3

41. Different – Problem 1, the answer is 16 boys
 Problem 2, the answer is 16 marbles
 42. 1. Reliability of contractor 1 to complete the job (trust)
 2. Job performance of contractor 1 is excellent (quality of work)
 3. Highly recommended by other clients
 4. Completion date of the job is uphold. Etc.
 43. 21 528cm²
 44. Triangular based prism Faces = 5 Edges = 9 Vertices = 18

45. (i) 65 (ii) 88 marks

TEST 11

SECTION 1

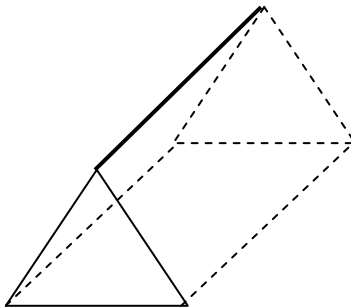
1. One million, eight hundred and three thousand, five hundred and four.
2. 264%
3. 8.4
4. $1\frac{1}{4}$
5. 300
6. 6
7. $1\frac{1}{8}$
8. \$900
9. 200 cookies
10. 450 %
11. 20cm
12. 3 times
13. 4 hours 45 minutes
14. 22 500 grams
15. 2 right angles
16. 2 lines of symmetry
17. 2 right angles
- 18.

Type of Tea	Tally Marks	Frequency
Chocolate		22
Lipton		13
Green Tea		12
Coffee		9
Ice Tea		18

19. ||| ||| ||| ||| ||| ||| ||| ||| 28
20. Brian

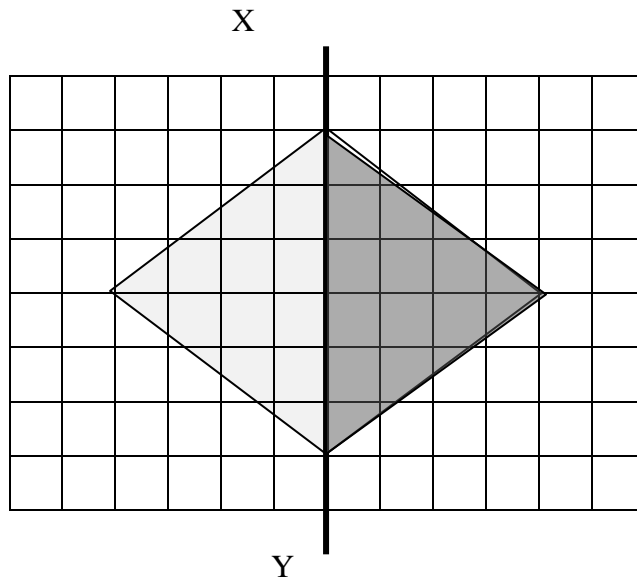
SECTION 2

21. 15
22. 28 mangoes
23. 25km
24. 385
25. 94
26. \$750
27. $\frac{118}{9}$
28. \$1 350
29. $\frac{5}{8}$ $\frac{7}{8}$
30. a. $33\frac{1}{3}\%$ b. 240 chicken pies
31. 50 slices
32. a. 13.5 kg b. 2.0kg
33. a. \$3 200 b. \$ 720
34. 4860 words
35. a.



- b. Vertices 18, Faces 5
36. West

37. (i)



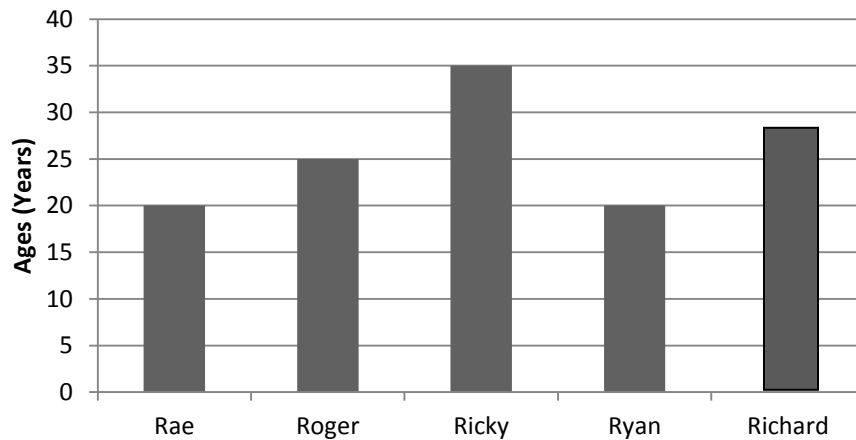
(ii) 4 lines

38. 6 numbers

39. a. Roger and Ricky

b. Rae and Ryan

Ages of 5 Friends



c.

40. a. 10 years b. 6 years

SECTION 3

41. a. $\frac{1}{4}$ b. 512 fruits

42. 36 cups of water

43. a. 68cm b. 304cm²

44. (i) right angled Isosceles triangles

(ii) No.

When the triangles are folded along the symmetrical line LM they will not match evenly. Any shape folded along a symmetrical line will fit exactly, on each other. This will not happen.

45.

Whole Life Insurance	☺ ☺ ☺ ☺
Motor Insurance	☺ ☺ ☺ ☺ ☺ ☺
House Insurance	☺ ☺ ☺ ☺ ☺ ☺
Pousions	☺ ☺ ☺ ☺ ☺
Term Life Insurance	☺ ☺ ☺ ☺ ☺ ☺ ☺

☺ = 20 polices

TEST 12

SECTION 1

1. $(4 \times 100\,000) + (0 \times 10\,000) + (6 \times 1000) + (5 \times 100) + (0 \times 10) + (3 \times 1)$
2. 0.18
3. 423 100
4. 20
5. 7
6. 30 children
7. $\frac{1}{10}$
8. 9
9. $\frac{11}{3}$
10. 4823, 4382, 4328, 4283
11. 2:40
12. 4.013 L
13. 80cm²
14. 1 728cm³
15. A
16. 6 edges
17. F and L.
18. 90 girls
19. Coconut and strawberry
20. Pauline

SECTION 2

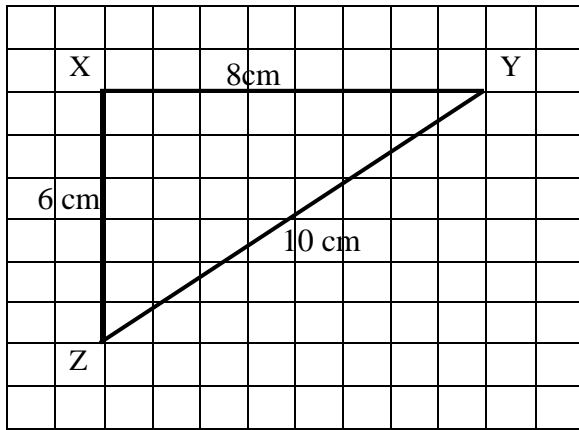
21. \$42.00
22. 6 weeks
23. $\frac{8}{27}$
24. Add 3, then add 4 (Repeat)
 $2^{+3}, 5^{+4}, 9^{+3}, 12^{+4}, 16^{+3}, 19^{+4}, 23$
25. a. $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$ and $\frac{11}{12}$ b. $1 \frac{7}{12}$
26. \$6.00
27. 6
28. \$3 003.00
29. \$240.00
30. a. 50% b. 400 students
31. (i) 9 ½ hours (ii) 8 hours
32. 87.57kg
33. 7:50a.m.
34. 110 minutes
35. a. 6 regular polygons b. rectangular based pyramid c. 4 lines
36. a. cube b. 12 edges
37. $\frac{3}{4}$ turn
38. 62.5kg or 62 ½ kg
39. (i) 8 (ii) 7 (iii) 7.0
40. a. 75 persons b. 40 persons

SECTION 3

41. a. 60 sticks b. 4 boxes 42. a. 401 tress b. 10 rest periods

43. a. 120 000 000 cm³ b. 8cm³ c. 15 000 000 B's

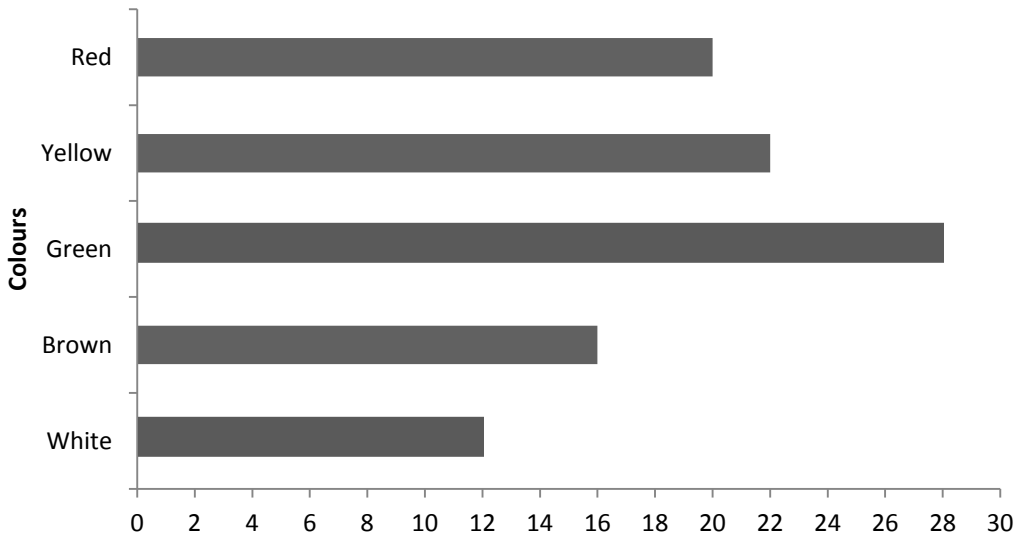
44.



b. 10cm c. Right angle triangle

45. a.  b. 12

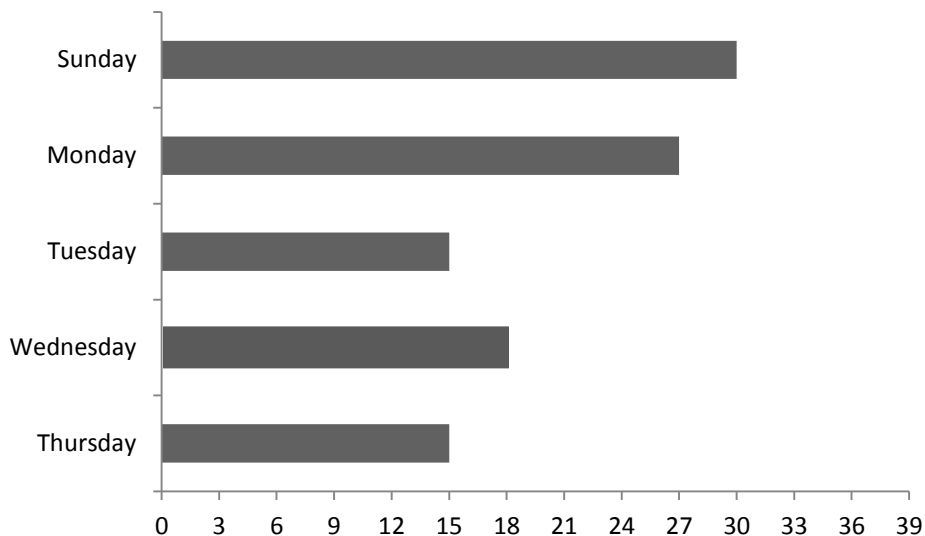
c.



TEST 13

SECTION 1

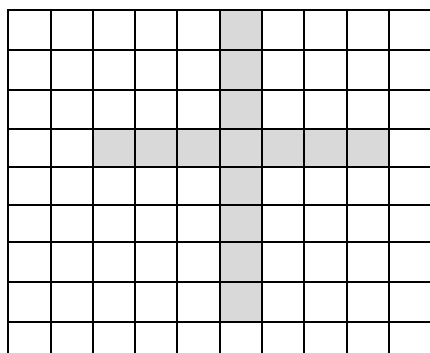
- | | | |
|-------------------------|---------------------|---------------------|
| 1. 808 808 | 2. 4.68 | 3. 23010 |
| 4. 105 | 5. 6 packs | 6. 60% |
| 7. 24 | 8. 341 times | 9. 31 |
| 10. 130 five cent coins | 11. 37.5 kg | 12. 3.5cm or 3 ½ cm |
| 13. 16cm | 14. 5.33L | 15. AB |
| 16. 6 edges | 17. Equal to ½ turn | 18. 4 runs |
| 19. | | |



20. 21 snow cones

SECTION 2

- | | | |
|--|---------|------------------|
| 21. $\frac{4}{15}$ | 22. 108 | 23. 416 tomatoes |
| 24. 53 years | | |
| 25. It is not possible. A fraction is related to its unit. There isn't a bigger half of the same unit.
$\frac{1}{2} = \frac{1}{2}$ of the same whole. | | |
| 26. | | |



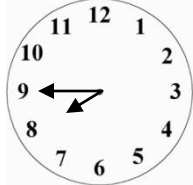
27. a. 24% b. 56%

28. 35 cases

29.

Decimal Fraction	Percentage	Common Fraction
0.35	35%	$\frac{7}{20}$

30. \$350 monthly



31.

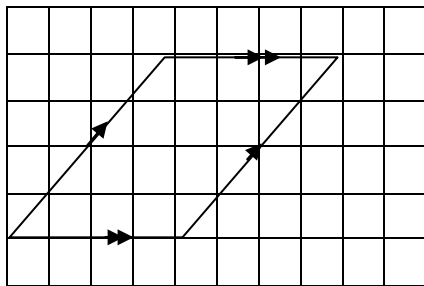
32. 29cm

33. 33 bottles

34. a. $x = 20$ $y = 29$ cm

b. 220cm^2

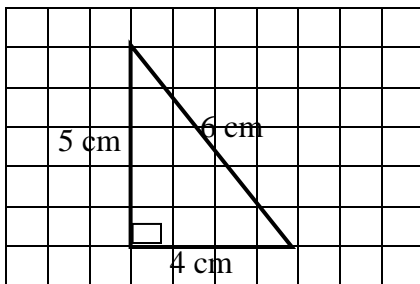
35. a.



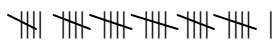
b. parallelogram

36. C and D

37. a.

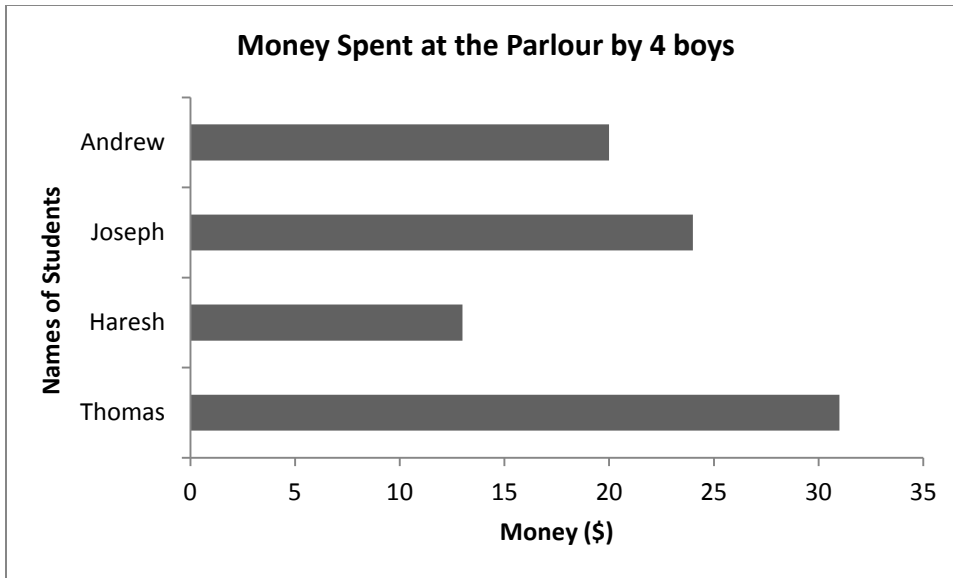


b. 10cm^2

38. a. 

b. \$88

39. \$ 22.00



40.

SECTION 3

41.

Cards	Number of Cards	Points
Ace	2	10
King	3	12
Queen	1	3
Jack	2	4
Deuce	6	6
Total	14	35

42. a. \$ 3 000.00

b. \$5 000.00

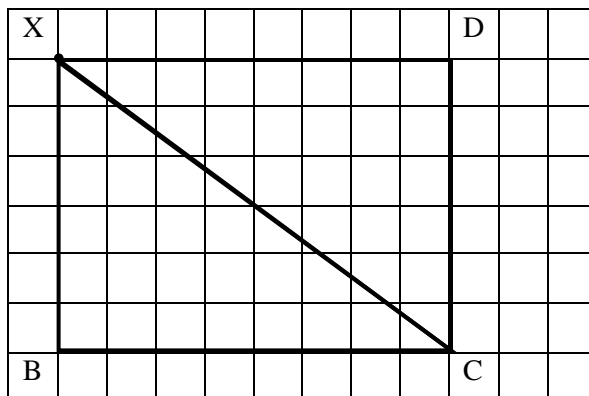
43. a. 4800cm²

b. 400

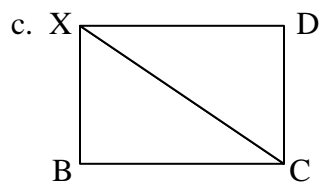
c. 3 sheets

44.

a.



b. 10cm



45. a. 45 marks

b. 63 marks

c. 135 marks

TEST 14

SECTION 1

- | | | |
|---------------------------------------|------------------|-------------------|
| 1. 140 | 2. 363.08 | 3. 60% |
| 4. $2\frac{1}{4}$ | 5. $\frac{2}{9}$ | 6. 26 |
| 7. true | 8. \$22.00 | 9. $\frac{8}{13}$ |
| 10. 2 | 11. 6 cm | 12. 10cm |
| 13. 5 400 seconds | 14. 100 packets | |
| 15. a. Cube b. Cylinder C. Cone | | |
| 16. Isosceles Triangle | 17. D | 18. 65.6 |
| 19. 59 | 20. 50 plants | |

SECTION 2

- | | | |
|--|---|---|
| 21. 120 records | 22. $66\frac{2}{3}\%$ | 23. $\frac{11}{12}$, $\frac{5}{6}$, $\frac{11}{12}$ and $\frac{2}{3}$ |
| 24. 0.4 and 2.2 | 25. a. $\frac{1}{3}$ b. $\frac{1}{4}$ c. $\frac{5}{12}$ | 26. $\frac{1}{20}$ |
| 27. $x = 45$, $a = 4$ | | |
| 28. $8 \cdot 4 \div 1 \cdot 0 = 8 \cdot 4$
$8 \cdot 4 \div 0 \cdot 1 = \underline{84.0}$
$8 \cdot 4 \div 0 \cdot 01 = \underline{840.0}$
$8 \cdot 4 \div \underline{10} = 0 \cdot 84$ | | |
| 29. 104 | 30. a. 9 000 b. (i) 4950 (ii) 4050 | |
| 31. Yes. 5.7cm was rounded off (approximated) to the nearest whole number = 6 cm.
8.2 cm was also rounded off (approximated) to the nearest whole number = 8 cm
\therefore Estimation $8 \times 6 = 48.0\text{cm}^2$ is valid. | | |

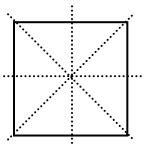
32. No. The square has the dimension of length and breadth. Since the length and breadth are equal, we can therefore use Side x Side, as well as Length x Breadth.

33. 9 layers

34. 7kg 275g

35. ii and iii

36. Yes



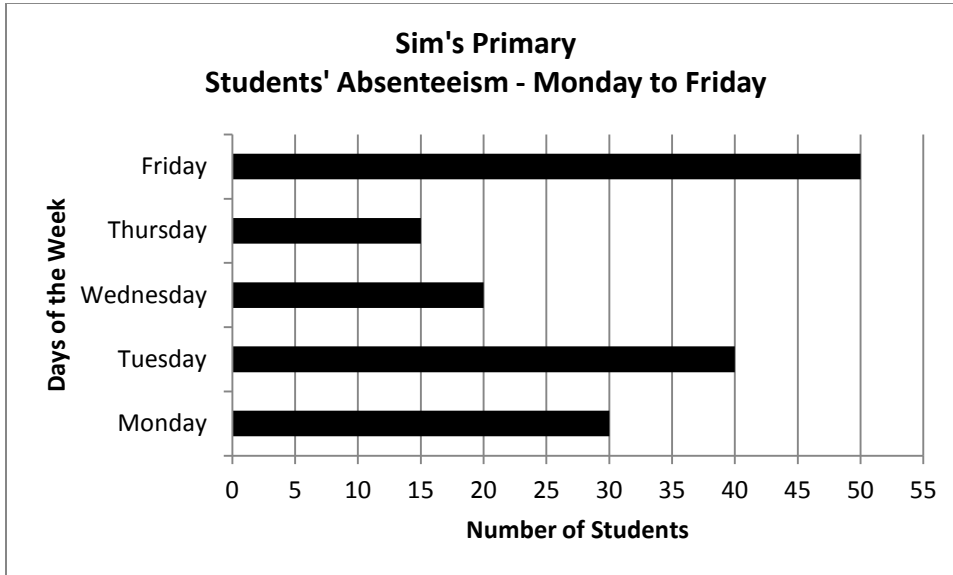
37. a. 1) 3 sides of 1 triangle and an angle = 3 sides of the other and an angle
2) 3 angles and a side are equal to 3 angles of the other triangle and a side
3) 2 angles and 1 side of a triangle = 2 angles and 1 side of each other triangle

b. trapezium

38. 96

39. Batsman B

Batsman B has the better mean.
 Batsman A's mean = 42 runs.
 Batsman B's mean = 43 runs



40.

SECTION 3

41. a. 150 portugals b. Small Bags = 10 Large Bags = 15
 42. a. \$ 900.00 b. \$ 637.50 c. \$5 737.50
 43. a. 320m² b. 240 persons c. Volume = L x W x H or Area of Cross Section x Height
 44. a. Cube
 b. Edges = 12 Vertices = 24 Symmetrical Lines = 4 Faces = Square
 45. a. 2nd Batsman b. 1st = 30 runs 2nd = 20 runs

TEST 15

SECTION 1

- | | | |
|---|-------------------|----------------------------|
| 1. 2, 5, 7, 11, 13 | 2. \$800 579. | |
| 3. Twenty five thousand three hundred and nine | | |
| 4. (1x 100 000) + (0 x 10 000) + (9 x 1 000) + (2 x 100) + (0 x 10) + (8 x 1) | | |
| 5. 4508 | 6. $\frac{3}{25}$ | 7. = |
| 8. \$ 280.00 | 9. 881 | 10. 399 361 |
| 11. Kilograms | 12. Millimetres | 13. Midway between 5 and 6 |
| 14. Wednesday | 15. 8 | 16. South |
| 17. 1 line | 18. 35 workers | 19. 165cm |
| 20. 3 goals | | |

SECTION 2

21. $\sqrt{64} = 8$

22. Yes.

Question 1: $2.5 \times 2.1 = 2\frac{5}{10} \times 2\frac{1}{10} = \frac{25}{10} \times \frac{21}{10} = \frac{525}{100} = 5.25$

Question 2: $25 \times 0.21 = 25 \times \frac{21}{100} = \frac{525}{100} = 5.25$

23. \$240.00

24. 50 marbles

25. (i) \$6.00 a dozen (ii) Calculate the unit price. (1 egg) in (a), (b) and compare to c.

26. 7 and 9

27. Prime Numbers = 17, 19, 23, 29

Square Numbers = 16, 25

28. $6\frac{1}{10}$

29. 121

30. 15 groups

31. 30cm^2

32. (i) 1 000 000 cm^3 (ii) 1 000 litres

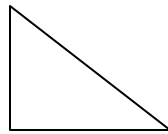
33. a. 14.25 kilograms or $14\frac{1}{4}$ kilograms b. 14 250 000 milligrams

34. a. $5\frac{1}{2}$ hours

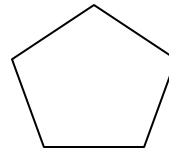
b. 7:00p.m.

35. a. Triangle and Pentagon

c.

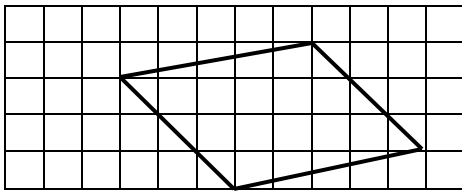


Triangle



Pentagon

36.

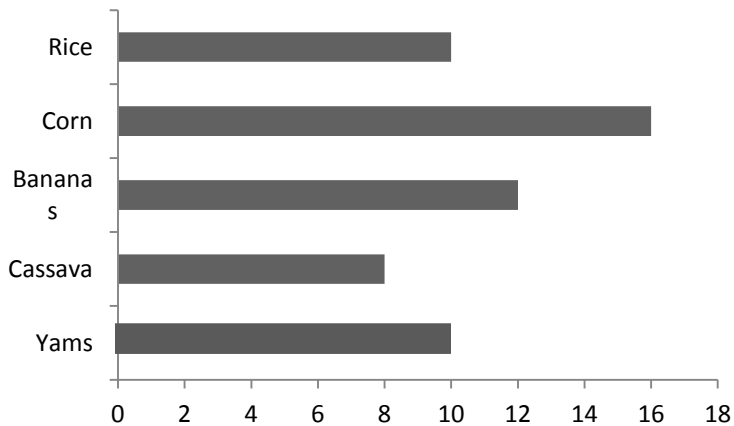


37. Parallelogram

38. 9

39. 9 years

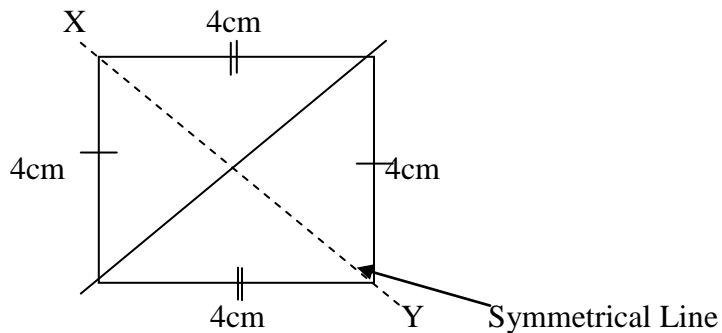
40. a.



b. 56 acres

SECTION 3

41. a. 80 and 28 b. 28 c. 28, 56 and 80 d. 19
42. a. 55 cars b. 6 months
43. a. 31st October 2012 b. Saturday c. 2001 d. Thursday 29th
44. a. No
 b.



All sides in the square are equal. Therefore the XY is symmetrical. In the rectangle, opposite sides are equal, therefore the line XY is not a symmetrical line.

45. a. 35 runs b. Less than 55 runs
 c. After his 6th and 7th score his new mean is 41.
 e.g. Total after 7 innings = 287 runs
 Mean = $287 \div 7 = 41$ runs

END OF TEST