2014 PRIMARY 6 MID-YEAR MATHEMATICS EXAMINATION

Name : _____( ) Date: 16 May 2014

Class : Primary 6 ( ) Time: 8.00 a.m. – 8.50 a.m.

Parent's Signature : _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS

PAPER 1

(BOOKLET A)

20

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 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 correct oval on the Optical Answer Sheet.

(20 marks)

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1) 7 ones, 4 tenths and 1 thousandths is _____.

(1) 0.741
(2) 7.041
(3) 7.401
(4) 7.410

2) Round off 567 895 to the nearest ten.

(1) 567 880
(2) 567 890
(3) 567 900
(4) 567 990

3) 9090 g is the same as _____.

(1) 9 kg 9 g
(2) 9 kg 90 g
(3) 90 kg 9 g
(4) 90 kg 90 g

4) Arrange these fractions in order starting with the greatest.

$\frac{4}{7}$, $\frac{4}{5}$, $\frac{4}{11}$

(1) $\frac{4}{5}$, $\frac{4}{7}$, $\frac{4}{11}$

(2) $\frac{4}{11}$, $\frac{4}{5}$, $\frac{4}{7}$

(3) $\frac{4}{11}$, $\frac{4}{7}$, $\frac{4}{5}$

(4) $\frac{4}{5}$, $\frac{4}{11}$, $\frac{4}{7}$

5) Which of the following is **not** equivalent to 18 : 12?

(1) 45 : 30
(2) 36 : 26
(3) 24 : 16
(4) 15 : 10

6) What is the missing number in the box?

$$\frac{19}{11} + \frac{4}{11} = 2 + \frac{\square}{11}$$

(1) 1
(2) 2
(3) 11
(4) 22

7) Mr Wee is $12n$ years old. How old was he five years ago?

(1) 7 years old
(2) $7n$ years old
(3) $(5 - 12n)$ years old
(4) $(12n - 5)$ years old

8) The table shows the time taken by 4 runners in a race.
Who came in first?

	Name	Timing (s)
(1)	Alex	15.14
(2)	Bala	15.4
(3)	Chandra	15.1
(4)	David	15.04

9) Express $1\frac{1}{20}$ hours in minutes.

(1) 21 min
(2) 63 min
(3) 103 min
(4) 120 min

10) Express 1.2% as a fraction in its simplest form.

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

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

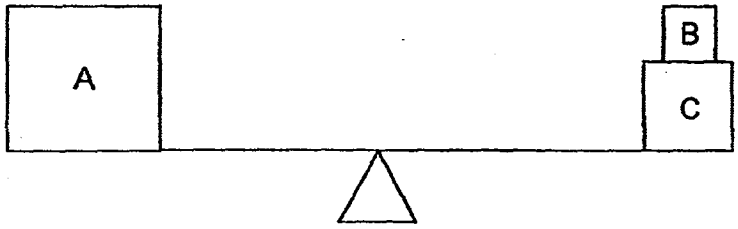
(3) $\frac{3}{25}$

(4) $\frac{3}{250}$

11) In a stationery shop, plastic folders are sold in boxes of 5 packs. Each box is sold at $2. Mrs Wee has $13. What is the maximum number of packs of plastic folders she can buy?

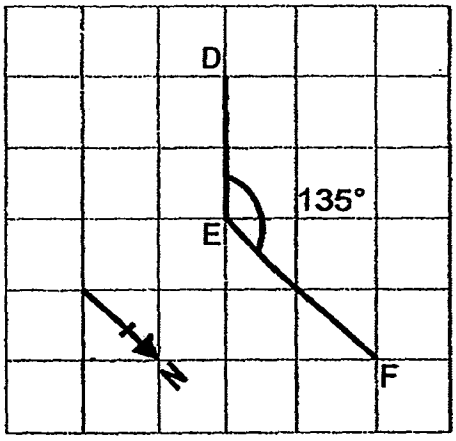
(1) 6
(2) 7
(3) 30
(4) 35

12) The diagram below shows three cubes on a balance scale.
The mass of Cube A is 3 kg. What is the average weight of the three cubes?



(1) 9 kg
(2) 2 kg
(3) 3 kg
(4) 6 kg

13)

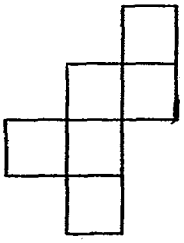


In the diagram above, D, E and F are three points on the ground.
In what direction is D from E?

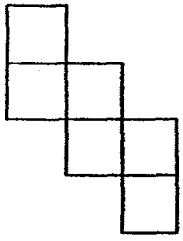
(1) North
(2) South
(3) North-East
(4) South-West

14) The figure below shows a cube.

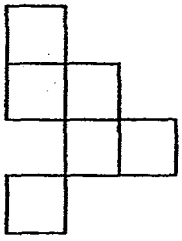
Which one of the following is **not** a net of the cube?



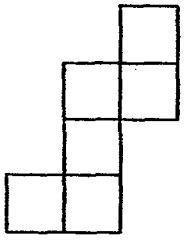
(1)



(2)



(3)



(4)

15) John placed ten plastic bowling pins in a row at equal distances.
The distance between the first and fifth pin was 60 cm.
Calculate the distance between the first and tenth pin.

(1) 108 cm
(2) 120 cm
(3) 135 cm
(4) 150 cm

2014 PRIMARY 6 MID-YEAR MATHEMATICS EXAMINATION

Name : _____( ) Date: 16 May 2014

Class : Primary 6 ( ) Time: 8.00 a.m. – 8.50 a.m.

Parent's Signature : _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS

PAPER 1

(BOOKLET B)

20

INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are NOT allowed to use a calculator.

Questions **16** to **25** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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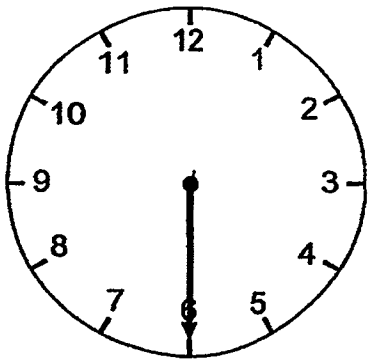
16) Write down the greatest common factor of 24 and 72.

Ans: _____

17) Use all the digits 2, 4, 6 and 8 to form the greatest four-digit number that is divisible by 4.

Ans: _____

18) The time is half past 12. Draw the hour hand on the clock face to show the time.



19) Divide 4003.5 by 5. The answer is _____.

Ans: _____

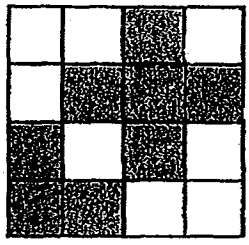
20) Pole A is 1.48 m long. Pole B is 9 cm shorter than Pole A.
What is the length of Pole B?

Ans: _____ m

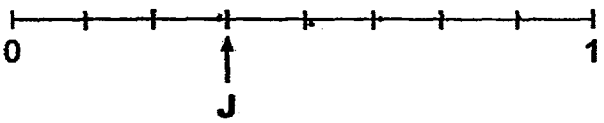
21) Vegetables are sold at 25¢ per 100 g in a grocery shop.
What is the price of 1 kg of vegetables?

Ans: $ _____

22) Using a dotted line, draw a line of symmetry on the figure below.

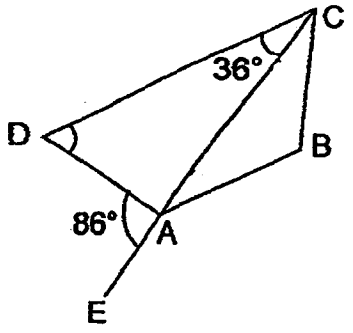


23) What is the percentage represented by the letter J?



Ans: _____ %

24) In the diagram below, not drawn to scale, ABCD is a trapezium. AB is parallel to DC and CE is a straight line. Find ∠CDA.



Ans: _____ °

25) A bottle is $\frac{1}{6}$ full of water. The water is then poured into an empty cup which has a volume $\frac{1}{2}$ that of the bottle. What fraction of the cup is filled with water?

Ans: _____

Questions **26** to **30** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

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26) There are cows, goats and sheep in a farm. The ratio of the number of cows to the number of goats is 2 : 3. The ratio of the number of sheep to the number of goats is 16 : 15. What is the ratio of the number of sheep to the number of goats to the number of cows at the farm?

Ans: _____

27) A box contains the same number of five-cent coins and ten-cent coins. The total value of the coins is $30. How many ten-cent coins are there in the box?

Ans: _____

28) Shah spent 40% of his money on a book and 5% of the remainder on a pen. What percentage of his money has he left?

Ans: _____ %

29) Mr Tham is five times as old his grandson now. His grandson will be 18 years old in 3 years' time. What was their total age 5 years ago?

Ans: _____ years

30) The ratio of the area of a square to the area of a rectangle is 1 : 3.
The area of the rectangle is 12 cm^2. Find the perimeter of the square.

Ans: _____ cm

- END OF PAPER 1 -

TAO NAN SCHOOL 道南学校

SINCERITY & PERSEVERANCE

2014 PRIMARY 6 MID-YEAR MATHEMATICS EXAMINATION

Name : _____ ( ) Date: 16 May 2014

Class : Primary 6 ( ) Time: 10.00 a.m. – 11.40 a.m.

Parent's Signature : _____

MATHEMATICS

PAPER 2

/ 60

INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Show your working clearly as marks are awarded for correct working.
6. You are allowed to use a calculator.

Questions **1** to **5** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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1) Mr Ang worked from 12.45 p.m. to 8.45 p.m. What fraction of the 24-hour day did he spend working? Give your answer in the simplest form.

Ans: _____

---

2) The total mass of Alan, Ben and Carl is m kg. Ben's mass is 32 kg. Alan and Carl have the same mass. Express Alan's mass in terms of m.

Ans: _____ kg

---

3) Mr Ng held a gathering at his house. 60% of the guests were men and the rest were women. 10% of the men and 20% of the women were his neighbours. What percentage of his guests were **not** his neighbours?

Ans: _____ %

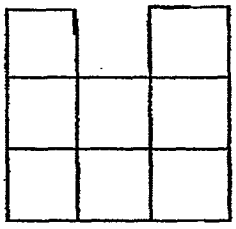
---

4) In a game, a participant must score an average of 95 or more points for 3 rounds in order to advance to the final round. Peter obtains 90 and 99 for the first 2 rounds. What is the lowest score he needs to obtain so that he can advance to the final round?

Ans: _____

---

5) The figure below, not drawn to scale, is made up of squares.
If the area of the figure is 648 cm^2, what is the perimeter of the figure?



Ans: _____ cm

For questions **6** to **18**, show your working clearly in the space provided for each question and write your answers in the spaces provided.
The number of marks available is shown in brackets [ ] at the end of each question or part-question. (50 marks)

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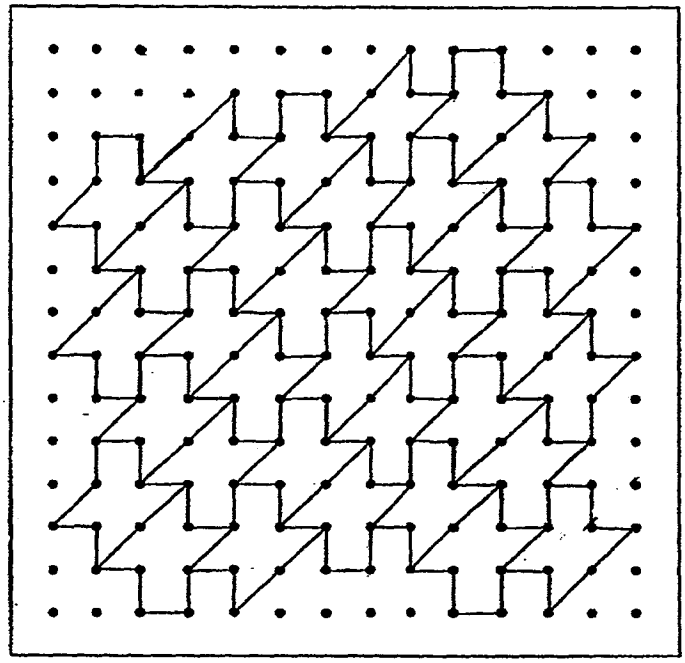
6) The pattern in the box below shows part of a tessellation.



(a) Shade a unit shape of the tessellation. [1m]

(b) Extend the tessellation by drawing two more unit shapes in the space provided in the box. [2m]

---

7) There were some pies and cakes for sale in a pastry shop. $\frac{1}{4}$ of the pastries were pies. The pastry chef then baked an equal number of pies.

(a) Will the percentage of cakes increase, decrease or remain the same?

(b) What percentage of the pastries will be cakes?

Ans: (a) _____ [1m]

(b) _____ [2m]

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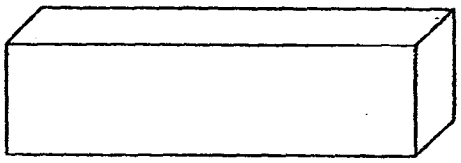
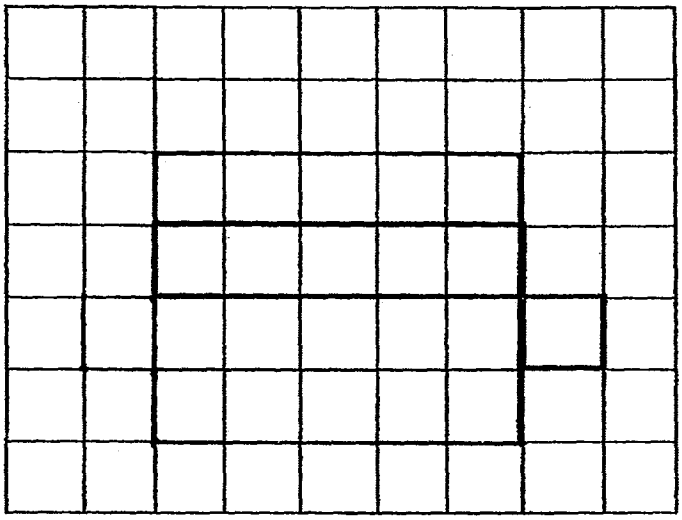
8)



(a) Name the solid.

(b) Complete the net of the above solid. [2m]



Ans: (a) _____ [1m]

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9) Mr and Mrs Cheng went on an excursion with their 6 children. An average amount of $84 was spent by each adult while an average amount of $62 was spent on each child. What was the average amount of money spent on each person?

Ans: _____ [3m]

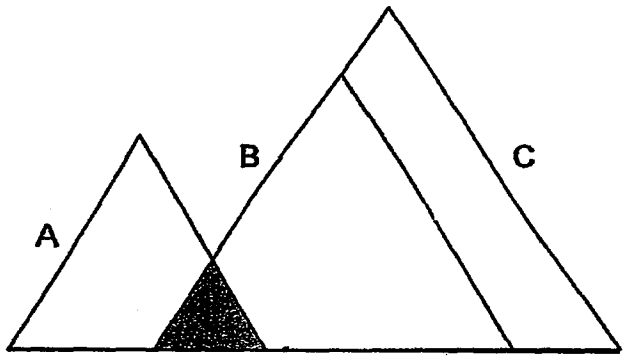
---

10) Mrs Dewi has some sweets for pupils in the Maths Club. If she gives each pupil 2 sweets, she will have 3 sweets left. If she gives each pupil 3 sweets, she will need 42 more sweets. How many sweets does she have?

Ans:_____ [3m]

---

11) The figure below, not drawn to scale, shows 3 triangles overlapping one another. The ratio of the area of Triangle A to the area of Triangle B to the area of Triangle C is 1 : 2 : 3. $\frac{1}{5}$ of Triangle A is shaded. What fraction of the figure is unshaded?



Ans:_____ [3m]

---

12) At first, Frank had $\frac{7}{12}$ of the number of cards Gary had.

Then, Gary gave Frank 70 cards and both had the same number of cards.

(a) How many fewer cards did Frank have than Gary at first?

(b) How many cards were there altogether?

Ans: (a) _____ [2m]

(b) _____ [2m]

13) The table below shows Mrs Lau's expenditure on groceries and transportation from January to May in a year.

Month	Groceries ($)	Transportation ($)
January	900	65
February	750	85
March	910	90
April	800	100
May	600	60

(a) In which month was the expenditure on groceries 150% of that in May?

(b) What was the percentage increase/decrease in expenditure from March to April?

Ans: (a)_____ [2m]

(b)_____ [2m]

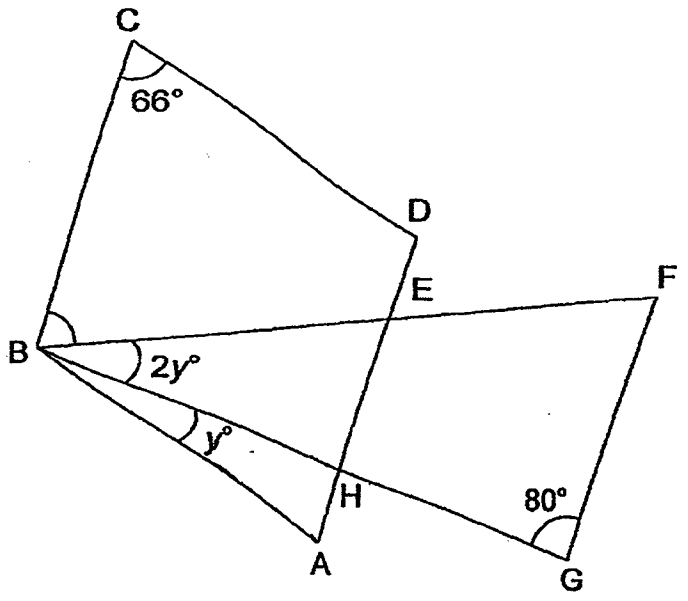
14) In a test, 10 marks were awarded for every question answered correctly.
5 marks were deducted for every question answered incorrectly.
A candidate answered 7 questions incorrectly and scored 195 marks.
Find the total number of questions in the test.

Ans:_____[4m]

15) In the diagram below, not drawn to scale, ABCD is a rhombus. BEF and BHG are straight lines. DA is parallel to FG.

(a) Find ∠GBF.

(b) Find ∠FBC.



Ans: (a)_____[3m]

(b)_____[2m]

16) Ahmad receives $5 more pocket money than Faizal each week.
Both spend $15 per week on food and save the rest.
After a few weeks, Ahmad saves $72 but Faizal only saves $32.

(a) What is Ahmad's weekly pocket money?

(b) Faizal wants to buy a watch that costs $44. How many more weeks must he save in order to buy it?

Ans: (a)_____ [3m]

(b)_____ [2m]

17) Meg and Lea have some white and black bands.
The number of white and black bands that Meg has are in the ratio 7 : 8.
Lea has twice as many white bands as black bands.
Meg gives half of her black bands to Lea and has 132 bands left.
In the end, the ratio of the number of white bands to the number of black bands that Lea has becomes 5 : 4.

(a) How many black bands has Meg given to Lea?

(b) How many bands does Lea have in the end?

Ans: (a)_____ [3m]

(b)_____ [2m]

18) At Shop A, Mr Tang bought a laptop for $2400 which was 20% more than the price that Shop B sold it for.

(a) How much did Shop B sell the laptop at?

(b) During a sale, both shops offered an equal percentage discount on the same laptop. Mr Tang bought a second laptop at Shop B and paid $320 less than the discounted price in Shop A. What was the percentage discount?

Ans: (a)_____ [2m]

(b)_____ [3m]

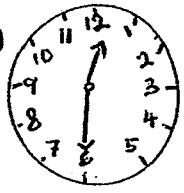
- END OF PAPER 2 -

Answer Ke

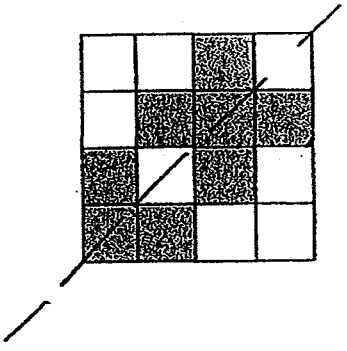
EXAM PAPER 2014
SCHOOL : TAO NAN
SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

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

16)24 **17)8624** **18)**  **19)800.7** **20)1.39M**

21)$2.50

22) 

23)37.5% **24)50°**

25) 1/3 **26)16 : 15 : 10** **27)200**

28)57% **29)80 years** **30)8 cm**

Paper 2

1)8/24 = 1/3

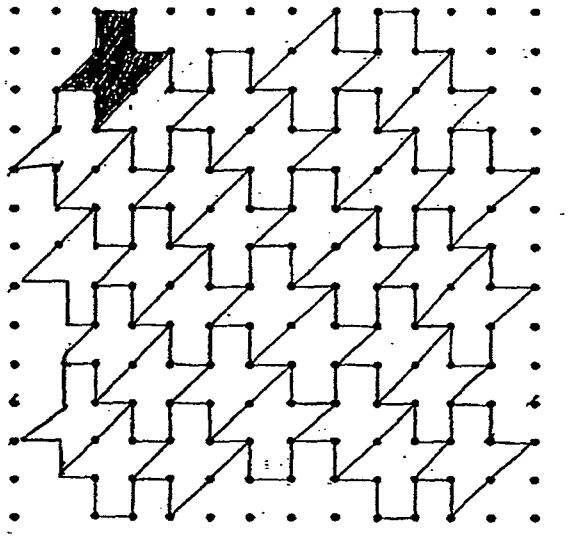
2) $\frac{m - 32}{2}$

3)10% of 60% →6%
20% 0f 40% →8%
100% - 8% - 6% = 86%

4)95 x 3 = 285
90 + 99 = 189
285 − 189 = 96

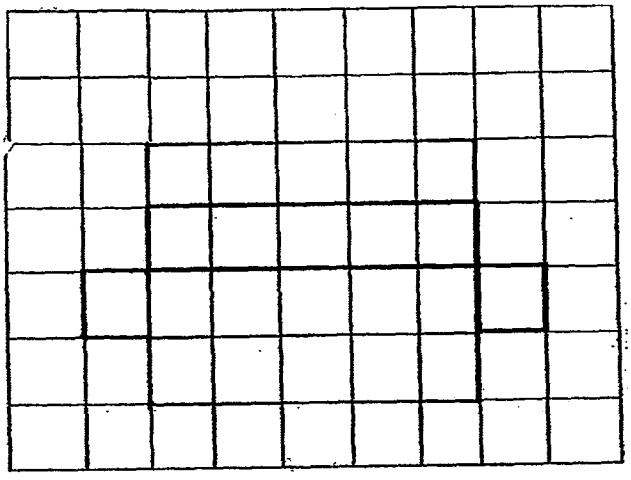
5)$\overline{648}$ ÷ 8 = 81
/81 = 9
14 x 9 = 126 cm

6)a)b)



7)a)decrease
b)3/5 = 60%

8)a)cuboid
b)



9)84 x 2 = 168
62 x 6 = 372
372 + 168 = 540
6 + 2 = 8
540÷8 = $67.50

10)3 – 2 = 1
42 + 3 = 45
45÷1 = 45
45 x 2 = 90
90 + 3 = 93

11)A : B : C
1 : 2 : 3
5 :10 : 15

4+1+9+5 = 19
4+9+5 = 18
18
19 of the figure is unshaded

12)a)14 + 24 = 38
38÷2 = 19
24 – 19 = 5
70 ÷5 = 14
14 x 10 = 140
b)14 x 38 = 532

13)a)600÷100 = 6
6 x 150 = 900
The month is January
b)910 + 90 = 1000
800 + 100 = 900
1000 – 900 = 100
100
1000 x 100% = 10%

14)7 x 5 = 35
195 + 35 = 230
230÷10 = 23
23 + 7 = 30

15)180° − 80° = 100°
180° − 100° − 66° = 14°
14° x 2 = 28°
∠GBF is 28°
a)ans: 14°

14° x 3 = 42°
180° − 66° = 114
114° − 42° = 72°
∠FBCis 72°
b)ans: 72°

16)a)72 − 32 = 40
40÷5 = 8
8 x 15 = 120
120 + 72 = 192
192÷8 = $24
b)120 + 32 = 152
152÷8 = 19
19 − 15 = 4
44 − 32 = 12
12÷4 = 3

17)a)7 + 4 = 11
132 ÷11 = 12
12 x 4 = 48
b)8 − 5 = 3
48÷3 = 16
10 + 8 = 18
16 x 18 = 288

18)a)2400 ÷120 = 20
20 x 100 = $2000
b)400 − 320 = 80
2400÷100 = 24
2000÷100 = 20
24 − 20 = 4
80÷4 = 20%