

METHODIST GIRLS' SCHOOL

Founded in 1887



PRIMARY 5 END-OF-YEAR EXAMINATION 2010 MATHEMATICS PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS)
provided.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 7 October 2010

This booklet consists of 6 printed pages including this page.

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.
(20 marks)

1. What is the value of $60 \div 2 \times (64 - 49)$?

- (1) 20
- (2) 2
- (3) 45
- (4) 450

2. Round off 563 982 to the nearest ten thousands.

- (1) 560 000
- (2) 563 000
- (3) 564 000
- (4) 570 000

3. On a bus, $\frac{3}{7}$ of the passengers are women. $\frac{1}{2}$ of the remainder are men and the rest are children. What fraction of the passengers on the bus are children?

- (1) $\frac{1}{14}$
- (2) $\frac{2}{7}$
- (3) $\frac{1}{2}$
- (4) $\frac{4}{7}$

4. What is the missing number in the box $1\frac{5}{9} = \frac{\square}{27}$?

- (1) 14
- (2) 15
- (3) 42
- (4) 45

(Go on to the next page)

5. There are _____ thousandths in $\frac{1}{5}$.

- (1) 20
- (2) 50
- (3) 200
- (4) 500

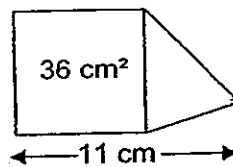
6. The average length of each step that John takes is 80 cm. How many steps must John take to reach the end of the room which is 6.5 m from where he is standing?

- (1) 8
- (2) 9
- (3) 12
- (4) 13

7. Clara is 11 years old. Her mother is 39 years old. What is the total age of Clara and her mother in 7 years' time?

- (1) 36
- (2) 43
- (3) 57
- (4) 64

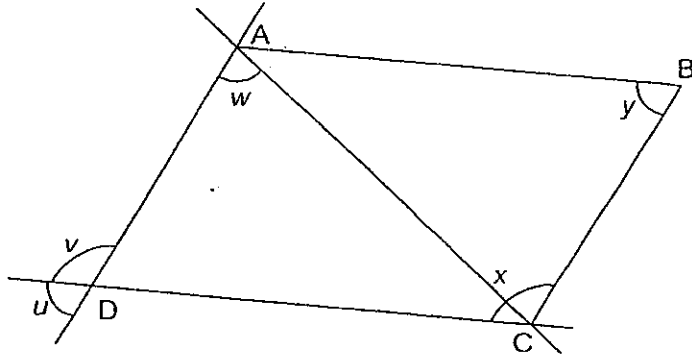
8. The figure below is made up of a triangle and a square with an area of 36 cm^2 . Find the area of the triangle.



- (1) 15 cm^2
- (2) 18 cm^2
- (3) 30 cm^2
- (4) 33 cm^2

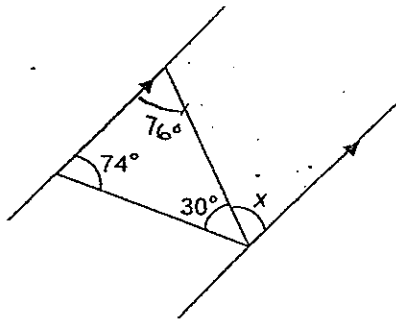
(Go on to the next page)

9. ABCD is a parallelogram. Which angle has the same value as $\angle y$?



- (1) $\angle u$
 (2) $\angle v$
 (3) $\angle w$
 (4) $\angle x$

10. In the figure not drawn to scale, find $\angle x$.



- (1) 44°
 (2) 60°
 (3) 75°
 (4) 76°

(Go on to the next page)

11. There are 560 eggs in a basket. $\frac{1}{2}$ of the brown eggs is equal to $\frac{3}{8}$ of the white eggs. How many brown eggs are there in the basket?

- (1) 120
- (2) 240
- (3) 280
- (4) 320

12. Given that $X : Y$ is $4 : 5$ and $Y : Z$ is $2 : 7$. When X increased by 25%, what is $X : Z$?

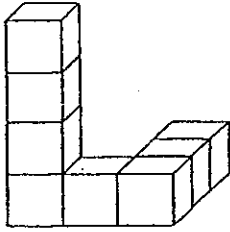
- (1) 2 : 7
- (2) 4 : 7
- (3) 5 : 4
- (4) 8 : 35

13. A factory employs 400 workers. $\frac{2}{5}$ of them walk to work, 25% of them take the public transport and the rest cycle. How many workers cycle to work?

- (1) 300
- (2) 240
- (3) 180
- (4) 140

(Go on to the next page)

14. The figure below shows an incomplete cube.
How many more cubes are needed to complete the solid?



- (1) 56
(2) 36
(3) 28
(4) 19
- 87
15. Jane scored an average of ~~82~~ 87 marks for English and Mathematics and an average of ~~85~~ 85 marks for Science and Mathematics in the mid-year examinations. What was her Science mark if she scored an average mark of 89 for all 3 subjects?

- (1) 87
(2) 89
(3) 93
(4) 97

End of Booklet A

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PRIMARY 5 END-OF-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 1
(BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 7 October 2010

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 7 printed pages including this page.

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)

16. What is the missing number in the box?

$$4956 \times 183 = 5100 \times 183 - \square \times 183$$

Ans: _____

17. Write 56 ten thousands and 92 hundreds as a numeral.

Ans: _____

18. Arrange the following fractions in descending order.

$$\frac{1}{6}, \frac{2}{3}, \frac{3}{4}, \frac{5}{12}$$

Ans: _____

(Go on to the next page)

19. What is the missing number in the box?

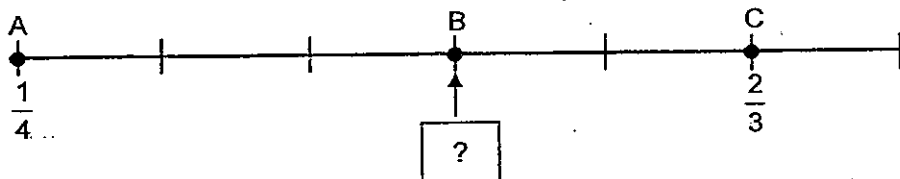
$$\frac{2}{7} \times \boxed{} = 14.$$

Ans: _____

20. Jane had 12 kg of flour. She used up $\frac{2}{5}$ of it to bake some cookies. How much flour did she have left?

Ans: _____ kg

21. In the number line below, A represents $\frac{1}{4}$ and C represents $\frac{2}{3}$.
What decimal is represented by B?



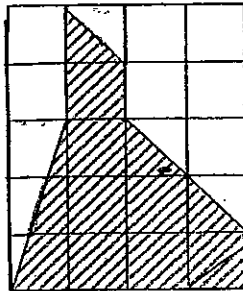
Ans: _____

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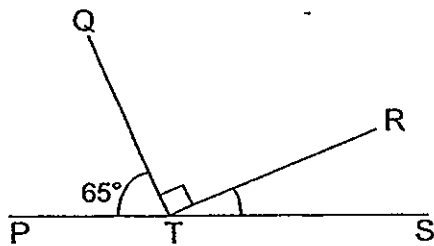
22. Amanda is 14 years old. Her brother is 12 years older. What is their average age?

Ans: _____ yr

23. Shade the figure so that 60% of the grid is shaded.



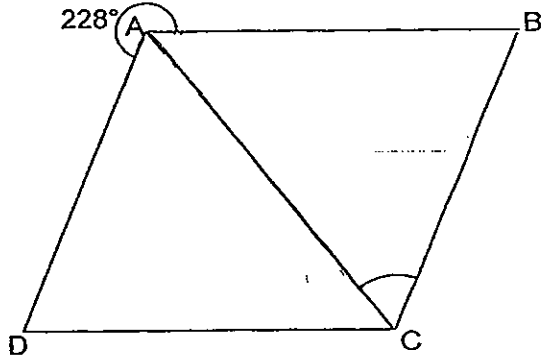
24. The figure below is not drawn to scale. PTS is a straight line and $\angle PTQ = 65^\circ$. Find $\angle RTS$.



Ans: _____°

(Go on to the next page)

25. The figure below is not drawn to scale. ABCD is a rhombus. Find $\angle BCA$.



Ans: _____^o

(Go on to the next page)

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

(10 marks)

26. Jerry had some beads. He can divide them equally into 2, 5 or 7 groups. What was the maximum number of beads that he had if he had less than 250 beads?

Ans: _____

27. A ribbon is cut into three pieces in the ratio 3 : 2 : 4. The difference in length between the longest and shortest piece is 0.72 m. What is the length of the ribbon?

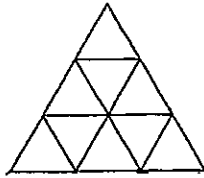
Ans: _____ m _____ cm

28. The usual price of a digital camera was \$250. The shopkeeper gave Samy a 20% discount. How much did Samy pay for the digital camera if he had to pay an additional 7% GST?

Ans: \$ _____

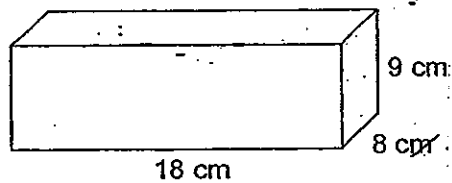
(Go on to the next page)

29. The figure below has a perimeter of 36 cm. It is made up of 9 identical triangles. What is the increase in the perimeter of the figure when a row of triangles is added to the base?



Ans: _____ cm

30. How many cubes with an edge of 2 cm can be placed in the box as shown below?



Ans: _____

End of Booklet B

METHODIST GIRLS' SCHOOL
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PRIMARY 5 END-OF-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 2

Duration: 1 h 40 min

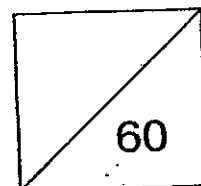
INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 5. _____

Date: 7 October 2010



This booklet consists of 14 printed pages including this page.

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

(10 marks)

1. Norman is 18 years old now. His father is 30 years older than him. In how many years' time will Norman be $\frac{3}{5}$ as old as his father?

Ans: _____

2. A jug can fill 4 glasses or 10 cups completely with water. Each glass can hold 300 ml of water. How much water is needed to fill 6 cups?

Ans: _____ ml

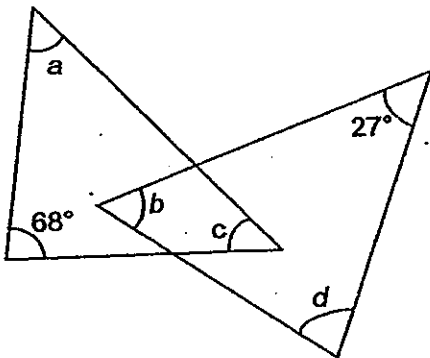
(Go on to the next page)

3. The table shows the activities enjoyed by 150 residents in Greenvale Estate. What percentage of the residents enjoy singing?

Hobbies	Number
Dancing	25
Playing Golf	33
Qigong	17
Singing	?
Walking	45

Ans: _____%

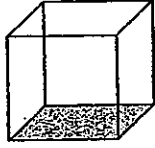
4. The figure below, not drawn to scale, is made up of 2 triangles. Find the value of $\angle a + \angle b + \angle c + \angle d$.



Ans: _____°

(Go on to the next page)

5. The figure below shows a cuboid with a volume of 320 cm^3 . Its height is 5 cm. Find the length of the square base.



Ans: _____ cm

(Go on to the next page)

For questions 6 to 18, show your working clearly 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)

-
6. $\frac{1}{5}$ of a group of pupils like to play football, $\frac{1}{2}$ of the pupils like to play netball, $\frac{1}{6}$ of the pupils like to play basketball, and the rest like to read.

- (a) What fraction of the pupils likes to play ball games?
(b) If 32 pupils like to read, how many pupils like to play football?

Ans: (a) _____ [1]

(b) _____ [2]

7. The ratio of John's age to Rachel's age is 7 : 3. Rachel is 16 years younger than John. In how many years' time will their average age be 37?

Ans: _____ [3]

(Go on to the next page)

8. Muffins are sold at Carol's Deli at the prices as shown below:



1 for \$1.50
2 for \$2.60
5 for \$6.00

- (a) What is the minimum amount Mrs Chong has to pay if she wants to buy 42 muffins?
(b) How much change will she receive if she gives the cashier 2 fifty-dollar notes?

Ans: (a) _____ [2]

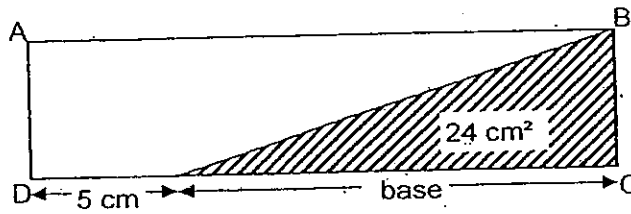
(b) _____ [1]

9. The sum of the last 3 pages of a book is a 3-digit number.
The digit in the hundreds place is five times the digit in the ones place.
The digit in the tens place is the second multiple of 3.
What is the last page number?

Ans: _____ [3]

(Go on to the next page)

10. In the figure below, the area of the shaded triangle is 24 cm^2 . The base of the triangle is 3 times its height. Find the area of the rectangle ABCD.



Ans: _____ [3]

11. A factory employed 120 workers. The ratio of the number of female workers to the number of male workers was 3 : 5. When 5 female workers left, the factory hired male workers to replace those who had left. What fraction of the workers are males now?

Ans: _____ [3]

(Go on to the next page)

12. Pail A contained $\frac{7}{17}$ of the amount of water in Pail B.

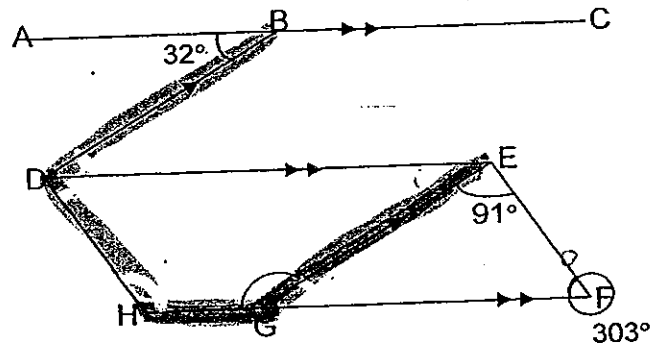
Pail C contained $\frac{1}{9}$ of the total amount of water the three pails had.

If Pail A and Pail B contained 5.25 litres of water more than Pail C, how much water did Pail B contain? (Give your answer in litres.)

Ans: - _____ [4]

(Go on to the next page)

13. The figure below is not drawn to scale. $ABCD$ is a parallelogram. AC is parallel to DE and HF . DB is parallel to GE .
- (a) Find $\angle EGH$.
- (b) Find $\angle BDH$.

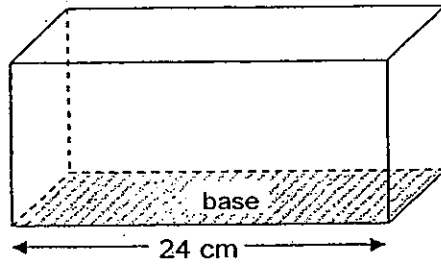


Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

14. The volume of a gift box is $1\,632\text{ cm}^3$. Its length is 24 cm . Its breadth is $\frac{1}{3}$ of its length.
- (a) Find its height.
- (b) What is the new volume when the length is increased by 10% ?



Ans: (a) _____ [1/1] ?

(b) _____ [3/1]

(Go on to the next page)

15.



Figure 1



Figure 2



Figure 3

Figure	Number of squares	Number of sticks
1	3	10
2	5	16
3	7	22
4	(a)	28

- (a) How many squares are there in Figure 4?
 (b) Which figure has 52 sticks?
 (c) How many sticks are needed to make 55 squares?

Ans: (a) _____ [1]

(b) _____ [2]

(c) _____ [2]

on to the next page)

16. Mrs Tan bought a total of 189 donuts and cupcakes. She gave $\frac{1}{2}$ of the donuts to Ally and $\frac{1}{3}$ of the cupcakes to Joseph. She then had 114 donuts and cupcakes left.
- (a) How many donuts did Mrs Tan buy?
- (b) If each donut cost \$0.80 and each cupcake cost \$1.80, how much did Mrs Tan pay for all the food?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17. There were 182 red, blue and green beads in the box. 26 green beads were removed from the box and the ratio of the number of red beads to the number of blue beads to the number of green beads became 4 : 3 : 5. Then some yellow beads were added and the ratio of the number of green beads to the number of yellow beads was 13 : 9.

- (a) What was the ratio of the number of red beads to the number of blue beads to the number of green beads at first?
- (b) How many beads were in the box at the end?

Ans: (a) _____ [2]

(b) _____ [3]

(Go on to the next page)

18. Mrs Goh bought a blouse with 30% of her money. Then she bought a bag which cost \$38 more than the blouse. She had \$142 left.
- (a) How much money did Mrs Goh have at first?
 - (b) What percentage of her money was spent on the bag?
(Give your answer correct to 1 decimal place.)

Ans: (a) _____ [2]

(b) _____ [3]

End of Paper

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It also emphasizes the need for regular audits to ensure the integrity of the financial data.

3. Furthermore, the document highlights the role of transparency in building trust with stakeholders.

4. Finally, it concludes by stating that a strong financial foundation is essential for long-term success.

5. The following table provides a detailed breakdown of the company's revenue and expenses for the quarter.

6. This data is presented in a clear and concise format to facilitate easy comparison and analysis.

7. The information is organized into columns and rows, allowing for a comprehensive overview of the financial performance.

8. The table below shows the total revenue generated from various sources, including sales and services.

9. Additionally, it details the costs associated with operations, such as salaries, rent, and utilities.

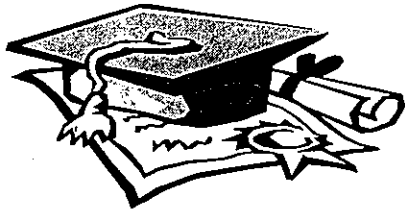
10. The net profit is calculated by subtracting the total expenses from the total revenue.

11. This calculation provides a clear picture of the company's profitability for the period.

12. The results indicate a steady increase in revenue and a decrease in expenses, leading to a higher net profit.

13. Overall, the financial performance is strong and reflects the company's commitment to excellence.

14. We look forward to continued growth and success in the future.

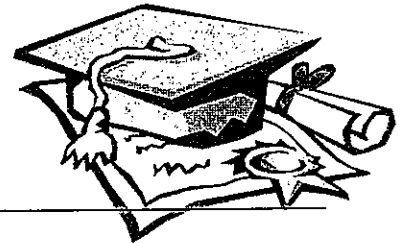


ANSWER SHEET

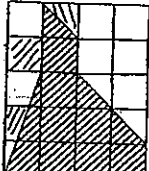
EXAM PAPER 2010

SCHOOL : MGS PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2



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

- 16)144 17)569200 18) $\frac{3}{4}, \frac{2}{3}, \frac{5}{12}, \frac{1}{6}$ 19)49 20)7.2kg
- 21)0.5 22)20 yr 23)  24)25° 25)66°
- 26)210 beads 27)3 m 24 cm 28)\$214 29)12cm
- 30)144 cubes

Paper 2

1) $30 + 18 = 48$ $48 - 18 = 30$ $30 \div 2 = 15$ $15 \times 3 = 45$ $45 - 18 = 27$	2) $300 \times 4 = 1200$ $1200 \div 10 = 120$ $120 \times 6 = 720\text{ml}$
3) $150 - 25 - 33 = 92$ $92 - 17 - 45 = 30$ $30/150 \times 100\% = 20\%$	4) $360^\circ - 27^\circ - 68^\circ = 265^\circ$
5) $320 \div 5 = 64$ $\sqrt{64} = 8\text{cm}$	6)a) $\frac{1}{5} + \frac{1}{2} + \frac{1}{6} = \frac{13}{15}$ pupils b) $1 - \frac{13}{15} = \frac{2}{5}$ $32 \div 2 = 16$ $16 \times 3 = 48$ pupils
7) $4u \rightarrow 16$ $1u \rightarrow 4$ $10u \rightarrow 40$ $74 - 40 = 34$ $34 \div 2 = 7$ years	8)a) $6 \times 8 = 48$ $48 + 2.60 = \$50.60$ b) $50 - 0.60 = \$49.40$

<p>9) $561 - 3 = 558$ $558 \div 3 = 186$ $186 + 2 = 188$</p>	<p>10) $24 \times 2 = 48$ $12 \times 4 = 48$ $12 + 5 = 17$ $17 \times 4 = 68\text{cm}^2$</p>
<p>11) $120 \div 8 = 15$ $15 \times 3 = 45$ $15 \times 5 = 75$ $75 + 5 = 80$ $80/120 = 2/3$</p>	<p>12) $27 - 24 = 3$ $24 - 3 = 21$ $5250 \div 21 = 250$ $250 \times 17 = 4250$ $4250\text{ml} = 4.25\text{L}$</p>
<p>13) $360 - 303 = 57$ $91 + 57 = 148$ $180 - 148 = 32$ $180 - 32 = 148$ $\angle EGH = 148^\circ$ $32 + 57 = 89$ $\angle BDH = 89^\circ$ a) $\angle EGH$ is equal to 148° b) $\angle BDH$ is equal to 89°</p>	<p>14) a) $24 \div 3 = 8$ $1632 \div (24 \times 8) = 8.5$ b) $8 \times 10/100 = 0.8$ $8.8 \times 24 \times 8.5 = 1795.2$ a) The height is 8.5cm b) The new volume is 1795.2cm^3</p>
<p>15) a) $3 + 2 \times 3 = 9$ There are 9 squares. b) $52 - 10 = 42$ $42 \div 6 = 7$ $7 + 1 = 8$ Figure 8 has 52 sticks. c) $55 \times 3 + 1 = 166$ 166 sticks are needed</p>	<p>16) a) $\frac{1}{2}$ of D + $\frac{1}{3}$ of C $\rightarrow 189 - 114 = 75$ $\frac{1}{2}$ of D + $\frac{2}{3}$ of C $\rightarrow 114$ $\frac{1}{3}$ of C $\rightarrow 114 - 75 = 39$ C $\rightarrow 39 \times 3 = 117$ $\frac{1}{2}$ of D $\rightarrow 75 - 39 = 36$ D $\rightarrow 36 \times 2 = 72$ $189 - 117 = 72$ She bought 72 donuts. b) $\\$0.80 \times 72 + \\$1.80 \times 117 = \\$268.20$ She paid $\\$268.20$</p>
<p>17) a) The ratio is 4:3:7 b) 201 beads</p>	<p>18) a) $142 + 38 = 180$ $180 \div 40 = 4.50$ $4.50 \times 100 = 450$ She had $\\$450$ at first b) $30/100 \times 450 = 135$ $135 = 38 = 173$ $173/450 \times 100\% \approx 38.4\%$ The percentage is 38.4%</p>