HENRY PARK PRIMARY SCHOOL
2011 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 1
(Booklet A)

Name: _____ ( )

Class: Primary 5 _____

30 Questions
40 Marks

Total Time for Booklet A and B: 50 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

READ AND FOLLOW INSTRUCTIONS CAREFULLY.

YOU ARE NOT ALLOWED TO USE A CALCULATOR.

Booklet A:

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.

For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided. (20 marks)

1. Which of the following is two million and thirty thousand in figures?

   (1) 23 000
   (2) 230 000
   (3) 2 030 000
   (4) 2 300 000 ( )

2. Round off 33 957 to the nearest hundred.

   (1) 33 000
   (2) 33 800
   (3) 33 900
   (4) 34 000 ( )

3. Find the value of 40 ÷ 8000.

   (1) 200
   (2) 20
   (3) 0.05
   (4) 0.005 ( )

4. Ali had 15 keychains. He gave away 3 keychains and sold the remaining at 3 for $1.50. Which of the options below shows the amount of money Ali collected from selling the remaining keychains?

   (1) (15 - 3) ÷ 3 x $1.50
   (2) 15 - 3 ÷ 3 x $1.50
   (3) 15 - 3 x $1.50
   (4) 3 x $1.50 ( )

5. Larry was given $1\frac{3}{5}$ h to complete his test paper. However, he completed it within $1\frac{1}{2}$ h. How much sooner did he complete his test paper?

(1) $\frac{1}{10}$ h

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

(3) $2\frac{2}{5}$ h

(4) $3\frac{1}{10}$ h ( )

6. Arrange the following fractions in **ascending** order.

$\frac{2}{5}$, $\frac{1}{2}$, $\frac{3}{8}$

(1) $\frac{1}{2}$, $\frac{3}{8}$, $\frac{2}{5}$

(2) $\frac{3}{8}$, $\frac{2}{5}$, $\frac{1}{2}$

(3) $\frac{2}{5}$, $\frac{1}{2}$, $\frac{3}{8}$

(4) $\frac{2}{5}$, $\frac{3}{8}$, $\frac{1}{2}$ ( )

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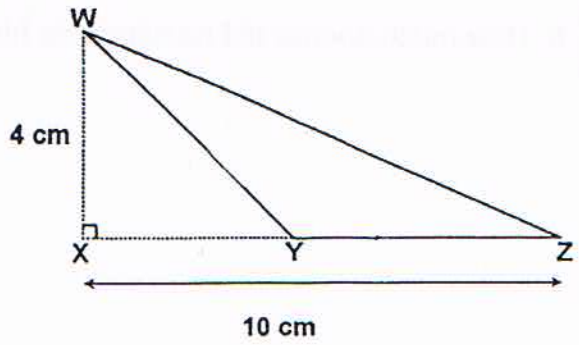
7. In the figure below, XYZ is a straight line and WX = XY.
Find the area of triangle WYZ.



(1) 8 cm^2
(2) 12 cm^2
(3) 20 cm^2
(4) 24 cm^2 ( )

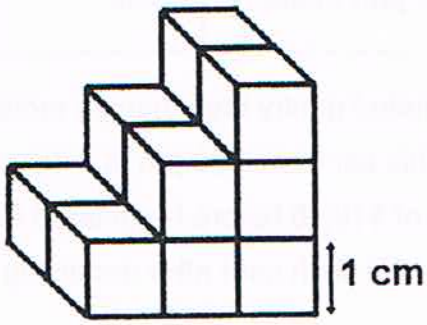
8. Amanda is 10 years old. She is 2 years older than Betty.
What is the ratio of Amanda's age to Betty's age?

(1) 4 : 5
(2) 5 : 4
(3) 5 : 6
(4) 6 : 5 ( )

9. 6 : 24 : 12 = 11 : ☐ : ☐

(1) 11 : 29 : 17
(2) 11 : 24 : 23
(3) 11 : 35 : 23
(4) 11 : 44 : 22 ( )

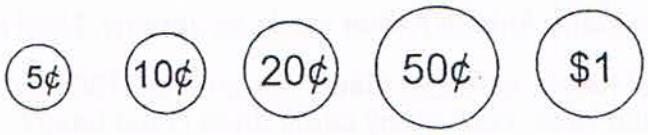
10. The figure below is made up of cubes of side 1 cm. Irfan wants to make a 3-cm cube from the 1-cm cubes. How many **more** 1-cm cubes does he need to add?



(1) 6
(2) 9
(3) 15
(4) 18

( )

11. John had **only** the following five coins in his wallet.



He took three coins from his wallet and dropped them into a donation box. Which of the following amount could **not** be his total donation?

(1) 65 ¢
(2) 80 ¢
(3) $1.35
(4) $1.55

( )

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12. Parking rates for a car park are as follows:

First hour	$1.20
Every additional $\frac{1}{2}$ hour or part thereof	$0.50

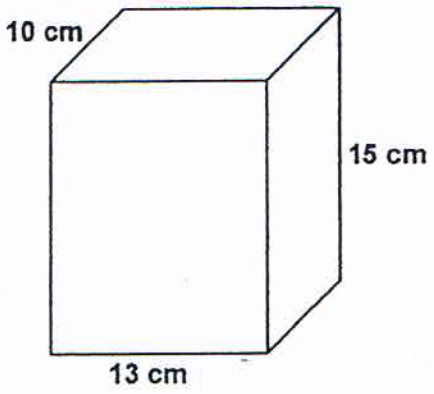
The car park has an automated gantry that charges motorists via their cash card. Mr Lee parked his car from 1.30 pm to 3.45 pm.
His cash card had a value of $19.45 before he entered the car park.
How much was left in Mr Lee's cash card after deducting his car park fee?

(1) $1.70
(2) $2.70
(3) $16.75
(4) $17.75 ( )

13. Gauri has $\frac{3}{5}$ as many Animal Kaiser cards as Jeremy. Noel has thrice as many Animal Kaiser cards as Gauri. Jeremy has 156 less Animal Kaiser cards than Noel. How many cards does Gauri have?

(1) 78
(2) 117
(3) 195
(4) 351 ( )

14. Melvin wants to cut as many 2-cm cubes as possible from the wooden block shown below. What is the maximum number of cubes he can cut from the wooden block?



(1) 210
(2) 243
(3) 280
(4) 975 ( )

15. The ratio of the number of boys to the number of girls in a class was 3 : 2. When 3 girls joined the class, the ratio of the number of boys to the number of girls became 6 : 5. How many girls were there in the class at first?

(1) 6
(2) 2
(3) 12
(4) 15 ( )

HENRY PARK PRIMARY SCHOOL
2011 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 1
(Booklet B)

Name: _____ ( )

Class: Primary 5 _____

30 Questions
40 Marks

Total Time for Booklet A and B: 50 min

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Booklet B:

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. In 904 010, what does the digit 4 stand for?

Ans: _____

17. Find the value of 69 x 7 + 14.

Ans: _____

18. Ali took 50 seconds to type 15 words. How long will he take to type 900 words?

Ans: _____ seconds

19. $25 \times 32 = 25 \times 4 \times \square$

Ans: _____

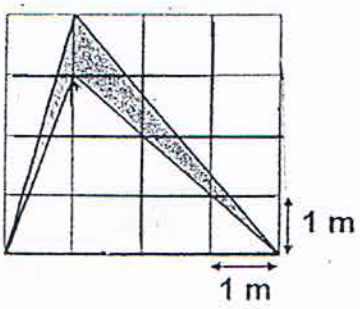
20. $5\frac{2}{5}$ can be regrouped as $3\frac{\square}{5}$. What is the missing number in the box?

Ans: _____

21. An Art class has an enrolment of 121 pupils. $\frac{7}{11}$ of the pupils wear glasses. How many of the pupils do not wear glasses?

Ans: _____

22. Find the area of the shaded part.



Ans: _____ m^2

23. A third of the pupils in Pr 5A play tennis. What is the ratio of the number of pupils in Pr 5A who play tennis to the number of pupils in Pr 5A who do not play tennis?

Ans: _____

24.

The usual price for the above potato chips is 2 packets for $5.10.

How much will Ali save if he buys 10 packets of potato chips at the above price?

Ans: $_____

25. A cube has a base area of 81 cm^2. Find its volume.

Ans: _____ cm^3

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)

26. Peter had 12 oranges and 18 pears. The oranges were put equally into some bags. The pears were also put equally into the same bags. No fruit was left over. What was the maximum number of bags Peter used?

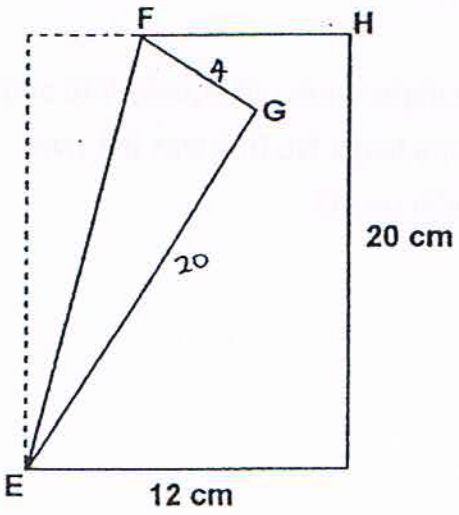
Ans: _____

27. Raja and Devi had the same amount of money. After Raja had donated $130 and Devi had donated $100 to the Japanese earthquake relief work, Raja had $\frac{1}{4}$ as much money as Devi. How much money did each child have at first?

Ans: $_____

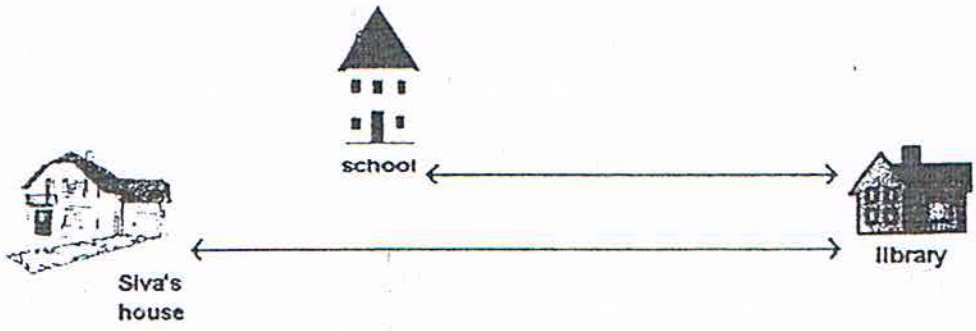
28. In the figure below, a rectangular piece of paper of length 20 cm is folded at corner G in such a way that FG is $\frac{1}{3}$ of its breadth.

Find the area of triangle EFG.



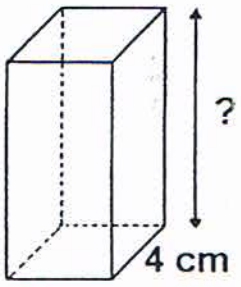
Ans: _____ cm^2

29. The distance between Siva's house and the library was 1.5 km. The distance between the library and the school was $\frac{3}{5}$ of the distance from his house to the library. What was the total distance that Siva had walked from his house to the library and then to his school?



Ans: _____ km

30. An iron cube of side 6 cm is melted and recast into a cuboid which has a square base of side 4 cm as shown below. What is the height of the cuboid?



Ans: _____ cm

-END OF PAPER-

HENRY PARK PRIMARY SCHOOL
2011 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 2

Name: _____ ( )

Class: Primary 5 _____

18 Questions
60 Marks

Total Time for Paper 2: 1 h 40 min

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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 space provided. For questions which require units, give your answers in the units stated. (10 marks)

1. Mr Tan ordered an enrichment book which cost $7.35 for each of his 36 pupils. For every 10 books ordered, 1 book was given free. How much did Mr Tan pay for the enrichment books?

Ans: $_____

2. How many eighths must be added to $2\frac{3}{4}$ to make $4\frac{1}{2}$?

Ans: _____

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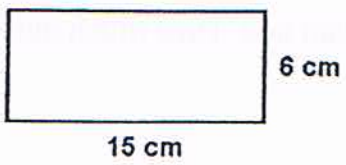
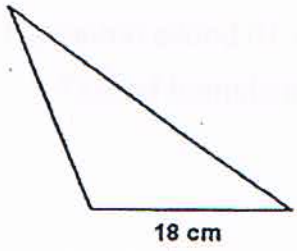
3. A piece of wire is bent to form a rectangle as shown in the figure below. The same piece of wire is re-bent to form a triangle of the same area. If the triangle has a base of 18 cm, what will be the height of the triangle?





Ans: _____ cm

4. Uncle Teo had $3\frac{1}{4}\ \ell$ of red paint. He used $\frac{3}{5}$ of it to paint the walls. How much paint had he left? Give your answer in the simplest form.

Ans: _____ ℓ

5. The ratio of the number of boys to the number of girls in a class was 5 : 1. After 24 boys left the class, there were equal number of boys and girls in the class. How many pupils were there in the class at first?

Ans: _____

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)

6. John bought 2 pens and 3 books for \$17.50. 1 book cost \$1.25 more than a pen. Find the cost of one such pen.

Ans: _____ [3]

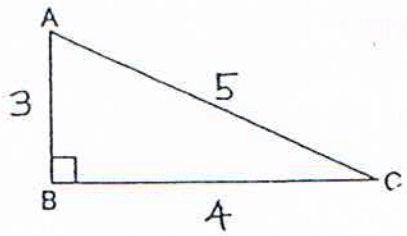
7. Meili has \$350 more than Jean. $\frac{3}{7}$ of Jean's money is equal to $\frac{1}{4}$ of Meili's money. How much money do they have altogether?

Ans: _____ [3]

8. $\frac{3}{8}$ of Kylie's beads were red and the rest yellow. She gave $\frac{2}{3}$ of her red beads and $\frac{7}{10}$ of her yellow beads to Janice. She was then left with 35 beads.
How many beads did she have at first?

Ans: _____ [3]

9. In the right-angled triangle shown below, the ratio of the length of sides AB : BC : CA is 3 : 4 : 5. The perimeter of the triangle is 156 cm.
What is the area of the triangle?



Ans: _____ [3]

10. Mr Sim has 35 long and short metal rods. The total mass of the long metal rods is 28.9 kg more than the total mass of the short metal rods. Each long metal rod has a mass of 2.2 kg and each short metal rod has a mass of 1.5 kg, how many long metal rods does Mr Sim have?

Ans: _____ [3]

11. Caili spent $\frac{6}{13}$ of her money on a bracelet. She spent $\frac{4}{7}$ of the remaining money on a dress. After buying the dress, she spent $\frac{1}{2}$ of what she had left on a watch.

(a) What fraction of her money had she left? (Give your answer in the simplest form)

(b) Given that she spent $40 more on the dress than the watch, how much money had she at first?

Ans: (a) _____ [2]

(b) _____ [2]

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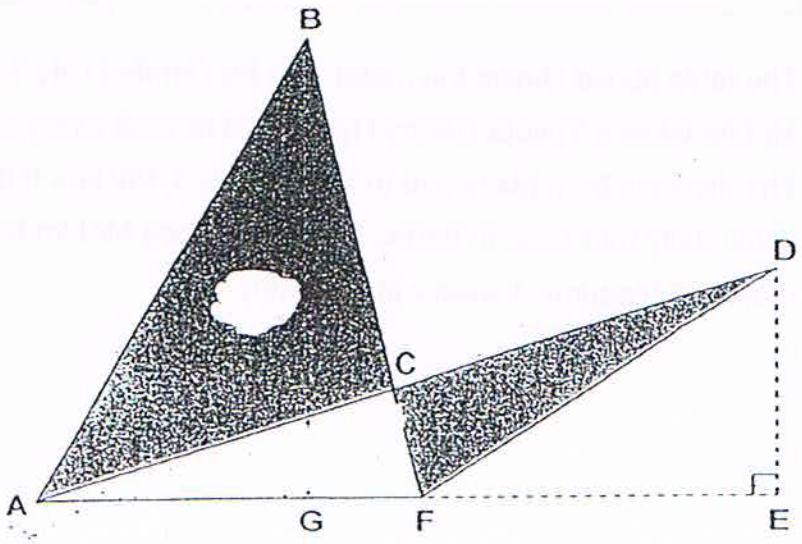
12.

Meter Fare for Comfort City Toyota Camry Hybrid Taxis	
The first 1 kilometre or less	$3.20
Every 385 metres thereafter or less (up to 10 km)	$0.20

The table above shows the meter fare for Comfort City Toyota Camry Hybrid Taxis. Mr Lim takes a Toyota Camry Hybrid taxi to work every day from Monday to Friday. The distance from his house to his office is 4.459 km. If the road condition is the same daily with smooth traffic, how much does Mr Lim have to pay for his taxi fare monthly? (Assume 4 weeks in a month)

Ans: _____ [4]

13. In the figure below, ABF and ADF are triangles. DE is half the length BG. Given that the area $\triangle ABF$ is 63 cm^2 and $\triangle ACF$ is 9 cm^2, find the shaded area of the figure.

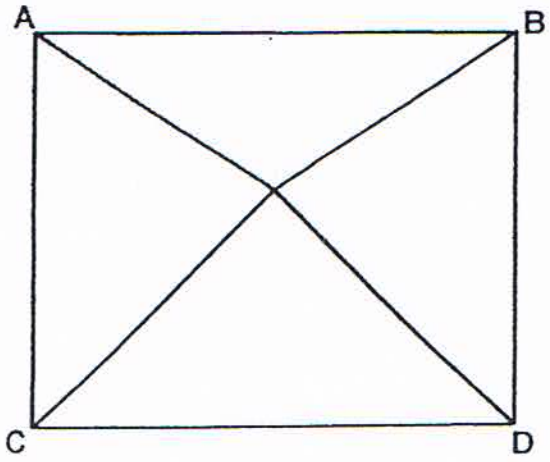


Ans: _____ [4]

14. John thinks of 2 numbers. The sum of the 2 numbers is 120. $\frac{1}{6}$ of the smaller number is 2 less than $\frac{1}{6}$ of the bigger number. What are the 2 numbers?

Ans: _____ , _____ [4]

15. The figure below is not drawn to scale. ABCD is a rectangle. Triangles AOC and BOD are identical. The area of triangle COD is 63.14 cm^2.
The ratio of the area of triangle AOB to the area of triangle COD is 3 : 7.
Find the area of triangle AOC .



Ans: _____. [4]

16. There were 920 spectators in the sports hall watching a badminton match. After $\frac{2}{5}$ of the children and $\frac{2}{7}$ of the adults left the hall, the number of children and the number of adults remaining in the hall were the same.

(a) How many children remained in the sports hall?

(b) How many adults were there in the sports hall at first?

Ans: (a) _____ [4]

(b) _____ [1]

17. The total cost of a file and a book is \$14. The total cost of a file and a calculator is \$32.20. Triston bought 4 files, 2 books and a calculator for \$63.40.

(a) Find the cost of one file.

(b) What was the total cost of one calculator and one book?

Ans: (a) _____ [3]

(b) _____ [2]

18. Mr Lim sold some fruits. The ratio of the number of apples to the number of oranges to the number of pears he sold was 5 : 6 : 3. Each apple cost as much as a pear. He sold all the 60 oranges at 5 for $2 and all the fruits were sold for $80. What is the price of a pear?

Ans: _____ [5]

END OF PAPER

Setters: Mdm Cecilia Quah

Mdm Zuraidah Samsudin

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ANSWER SHEET

EXAM PAPER 2011

SCHOOL : HENRY PARK PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

16)4000 17)497 18)3000 19)8 20)12

21)44 22)2m^2 23)1:2 24)$6.50 25)729cm^3

26)6 27)$140 28)40cm^2 29)2.4km 30)13.5cm

Paper 2

1. 36-3=33 **(M1)**

33 x $7.35 = **$242.55** (A1)

2. $4\frac{1}{2} - 2\frac{3}{4} = 1\frac{3}{4}$

$1\frac{3}{4} = \frac{14}{8}$ **(M1)**

14 (eighths) **(A1)**

3. Area of rect = 15 x 6 = 90 **(M1)**

(90 x 2) ÷ 18 = **10** **(A1)**

4 $1 - \frac{3}{5} = \frac{2}{5}$

$\frac{2}{5} \times 3\frac{1}{4}$ **(M1)**

$= 1\frac{3}{10}$ ℓ **(A1)**

5. B : G B : G

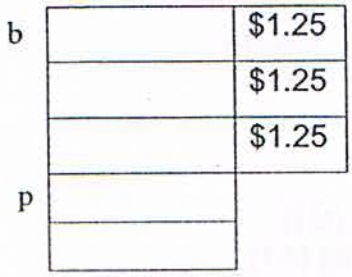
5 : 1 1 : 1

4 units —— 24 **(M1)**

1 unit —— 6

6 units —— 6 x 6 = 36 **(A1)**

6.



3 x $1.25 = $3.75

$17.50 - $3.75 = $13.75 **(M1)**

$13.75 ÷ 5 = **$2.75** **(M1A1)**

7. $\frac{3}{7}$ of Jean's money = $\frac{3}{12}$ of Meili's money

5 units = $350 **(M1)**

1 unit = $350 ÷ 5 = $70

19 units = 19 X $70 = **$1330** **(M1A1)**

OR

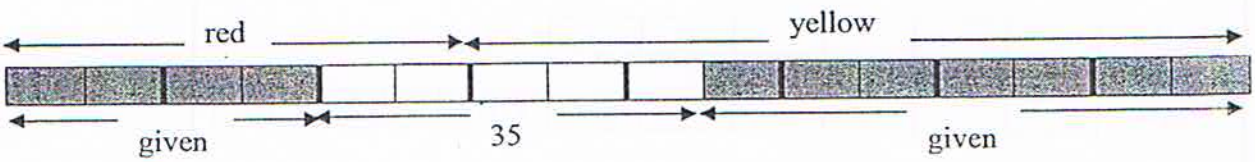
$\frac{3}{7} = \frac{12}{28}$ and $\frac{1}{4} = \frac{7}{28}$

5 units = $350 **(M1)**

1 unit = $350 ÷ 5 = $70

19 units = 19 x $70 = **$1330** **(M1A1)**

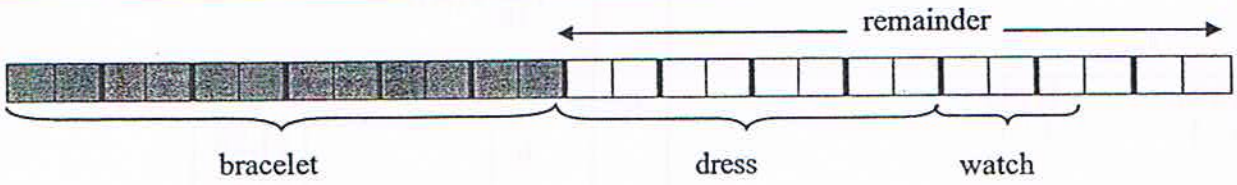
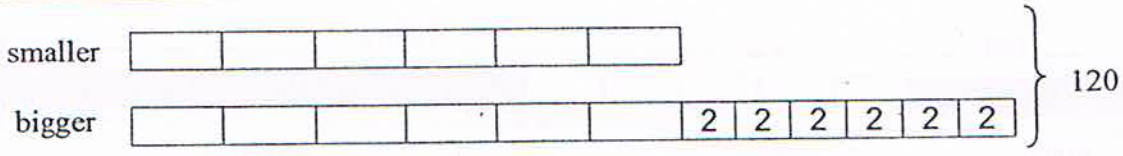
8.



5 units = 35 **(M1)**

1 unit = 7

16 units = **112** **(M1A1)**

9	12 units = 156 1 unit = 13 cm **(M1)** 3 units = 39 cm 4 units = 52 cm Area of triangle = ½ x 52 x 39 = **1014 cm^2 (M1, A1)**
10	Assume all are long metal rods, 35 x 2.2 = 77 kg **(M1)** 77 – 28.9 = 48.1 kg 48.1 ÷ (2.2 + 1.5) = 13 short metal rods **(M1)** 35 – 13 = **22** long metal rods **(A1)**
11 (a)	 $\frac{3}{26}$
(b)	5 units = \$40 **(M1)** 26 units = **\$208** **(A1)**
12	4459 – 1000 = 3459 (\$3.20) **(M1)** 3459 ÷ 385 ≈9 9x \$0.20 = \$1.80 **(M1)** \$3.20 + \$1.80 = \$5 **(M1)** \$5 x 5 x 4 = **\$100** **(A1)**
13	Area of △ADF = 63 ÷ 2 = 31.5 **(M1)** Area of △CFD = 31.5 – 9 = 22.5 **(M1)** Area of △ABC = 63 – 9 = 54 **(M1)** Area of shaded part = 54 + 22.5 = **76.5 cm^2 (A1)**
14	 6 x 2 = 12 120 -12 = 108 **(M1)** 12 units ------ 108 1 unit ------ 9 **(M1)** 6 units ------ 9x6 = **54** (smaller number) **(A1)** 120 – 54 = **66** (bigger number) **(A1)**

15	AOB:COD 3:7 7 u = 63.14 **(M1)** 1 u = 9.02 3 u = 9.02 x 3 = 27.06 **(M1)** 27.06 + 63.14 = 90.2 **(M1)** 90.2 ÷ 2 = **45.1** **(A1)** **OR** AOB:COD 3:7 7 u = 63.14 1 u = 9.02 5 u = 9.02 x 5 = 45.1
16 (a)	(Children left) $1 - \frac{2}{5} = \frac{3}{5} = \frac{15}{25}$ (Adults left) $1 - \frac{2}{7} = \frac{5}{7} = \frac{15}{21}$ }**(M1)** 25 + 21 = 46 units **(M1)** 46 units = 920 **(M1)** 1 unit= 20 15 units = 20 x 15 = **300** (A1)
(b)	21 units = 20 x 21 = **420** (A1)
17 (a)	(Given) 1F + 1B = \$14 2F + 2B = \$28 **(M1)** (Given) 1F + 1C = \$32.20 (Given) 4F + 2B + 1C = \$63.40 (2F + 2B) + (1F + 1C) + 1F =\$63.40 \$28 + \$32.20 + 1F = \$63.40 1F = \$63.40 - \$28 - \$32.20 **(M1)** = \$3.20 **(A1)**
(b)	1B = \$14 - \$3.20 = \$10.80 1C = \$32.30 - \$3.20 = \$29 \$10.80 + \$29 = **\$39.80** **(M1, A1)**

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END

18.	A: O : P 5 : 6 : 3 6 units = 60 **(M1)** or 50 + 30 = 80 (M1); or 50:60:30 (M1) 1 unit = 10 60 ÷5 = 12 groups **(M1)** 12 x $2= $24 **(M1)** $80 - $24 = $56 56 ÷ 80 = $0.70 **(M1,A1)** Or 80 units —— $56 1 unit —— 56 ÷ 80 = $0.70 **(M1,A1)**

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End