



Anglo-Chinese School (Primary)

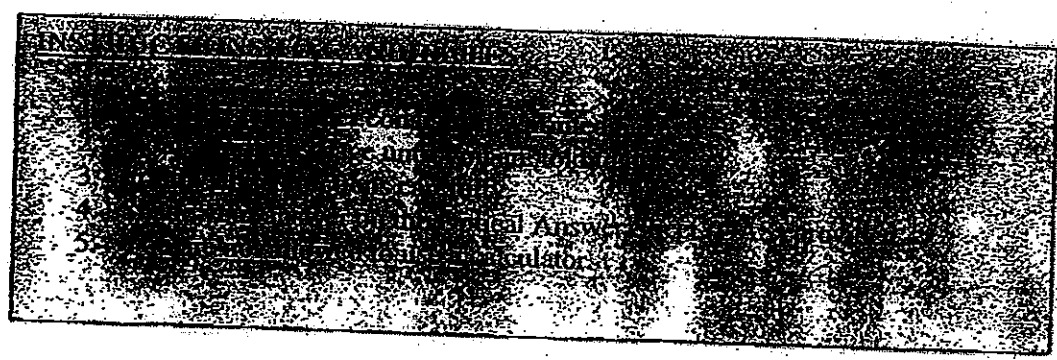
MID-YEAR EXAMINATION 2012
MATHEMATICS
PAPER 1 (BOOKLET A)
PRIMARY SIX

Name: _____ ()

Class: Primary 6 ____

Date: 9 May 2012

Duration of Booklet A & B: 50 min



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

Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (20 marks)

1. What is the value of $7d + 2d - 3$ if $d = 12$?

- 1) 84
- 2) 105
- 3) 108
- 4) 111

2. Find the difference of 63 tenths and 105 hundredths.

- 1) 5.25
- 2) 7.35
- 3) 52.5
- 4) 61.95

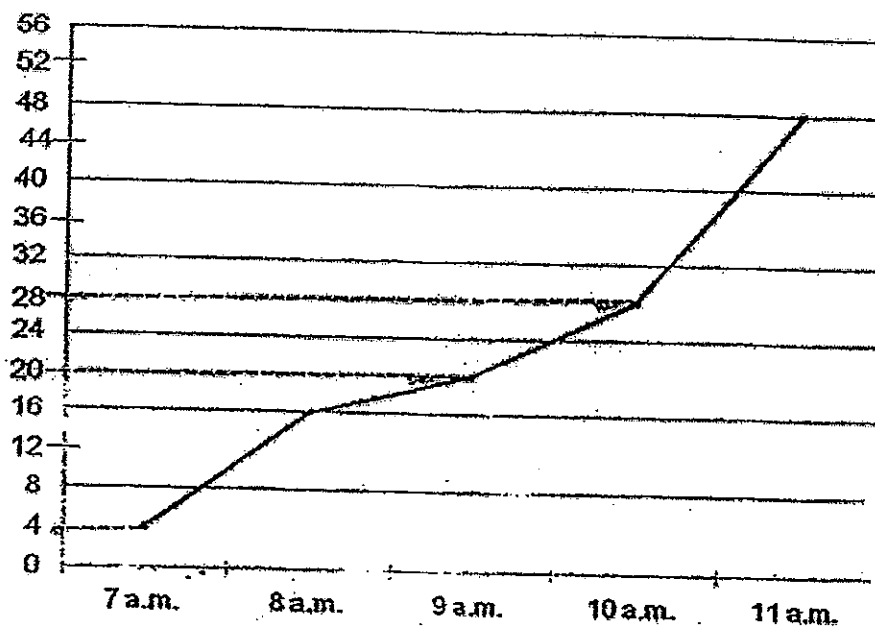
3. The total mass of 8 identical magazines is 2.08 kg. What is the total mass of 2 magazines in grams?

- 1) 260 g
- 2) 350 g
- 3) 520 g
- 4) 700 g

4. David started on his Math homework at 2.35 p.m.. If he had completed his Math homework at 4.05 p.m., how long did David take to complete his homework?

- 1) 1 h 20 min
- 2) 1 h 30 min
- 3) 2 h 10 min
- 4) 2 h 30 min

5. Lim started filling up a tank with water at 7 a.m.. The line graph shows the level of water filled from 7 a.m. to 11 a.m.



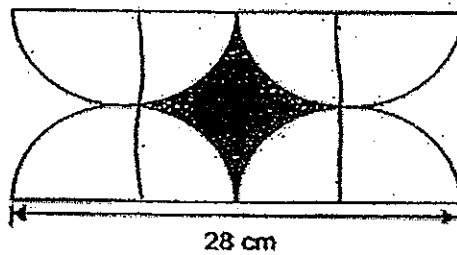
During which 1 h period was the increase in the volume of water the greatest?

- 1) 7 a.m. to 8 a.m.
- 2) 8 a.m. to 9 a.m.
- 3) 9 a.m. to 10 a.m.
- 4) 10 a.m. to 11 a.m.

6. Natalie reads 350 pages of a book in a week. If she reads 5 more pages than the previous day, find the number of pages she reads on the last day.

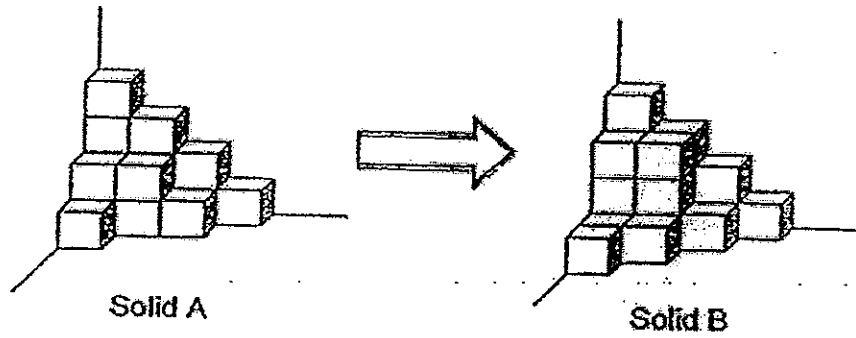
- 1) 35
- 2) 50
- 3) 65
- 4) 105

7. The figure below is made up of 4 similar semi-circles. Find the area of the shaded area. (Take $\pi = \frac{22}{7}$)



- 1) 168 cm^2
- 2) 154 cm^2
- 3) 44 cm^2
- 4) 42 cm^2

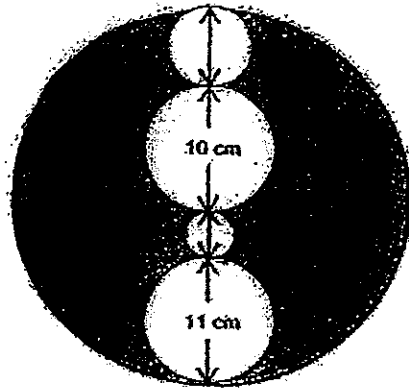
8. In the figures below, Solids A and B are made up of unit cubes.
How many unit cubes have been added to Solid A to form Solid B?



- 1) 1
2) 2
3) 3
4) 4
9. A Formula-One racer completes 40 laps on a 10-km track in $1\frac{1}{4}$ hours.
What is his average driving speed?

- 1) 5 km/h
2) 32 km/h
3) 50 km/h
4) 320 km/h

Use the diagram below for question 10.



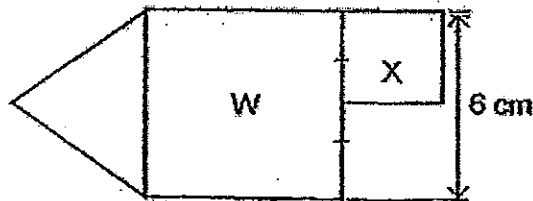
10. The figure shows 4 small circles in a big circle. Find the perimeter of the shaded part. ($\pi = \frac{22}{7}$)

- 1) 44 cm
- 2) 88 cm
- 3) 176 cm
- 4) 616 cm

11. There are an equal number of pupils in class 6A and class 6B. The ratio of the number of boys to the number of girls in class 6A is 1 : 3. The ratio of the number of boys to the number of girls in class 6B is 1 : 2. Find the ratio of the number of boys in 6A to the total number of boys and girls in both classes.

- 1) 1 : 7
- 2) 1 : 8
- 3) 3 : 4
- 4) 3 : 8

12. The diagram is made up of two squares and an equilateral triangle. Both W and X are squares. The length of Square W is twice the length of Square X. Find the perimeter of the figure.



- 1) 54 cm
- 2) 45 cm
- 3) 42 cm
- 4) 36 cm

13. The table shows the charges for Fast Taxi in Singapore. Mr Tan needs to travel from his home to the Airport at 1.00 a.m. He made an advance phone booking and travelled a total distance of 21.5 km, how much did he have to pay in all?

Fast Taxi Charges	
For first 1 km	\$2.80
For subsequent 10 km	\$0.52 per km
For subsequent 1 km or part thereof	\$0.60 per km
Surcharges	
Midnight to 5.59 a.m.	50% of metered fare
Advance Phone Booking Surcharge	\$8.00

- 1) \$14.60
2) \$22.60
3) \$24.70
4) \$29.90
14. During a carnival, Kayden donated 30% more books than Jason while Lenn donated 50% less books than Jason. If the 3 boys donated 196 books altogether, how many more books than Jason did Kayden donate?

- 1) 14
2) 21
3) 56
4) 91

15. The table with 4 columns is filled with numbers in a certain pattern. The first 4 rows of the table are shown below.

Column	A	B	C	D
Row 1	1	3	5	
Row 2		11	9	7
Row 3	13	15	17	
Row 4		23	21	19

In which column will the number 135 appear?

- 1) A
- 2) B
- 3) C
- 4) D



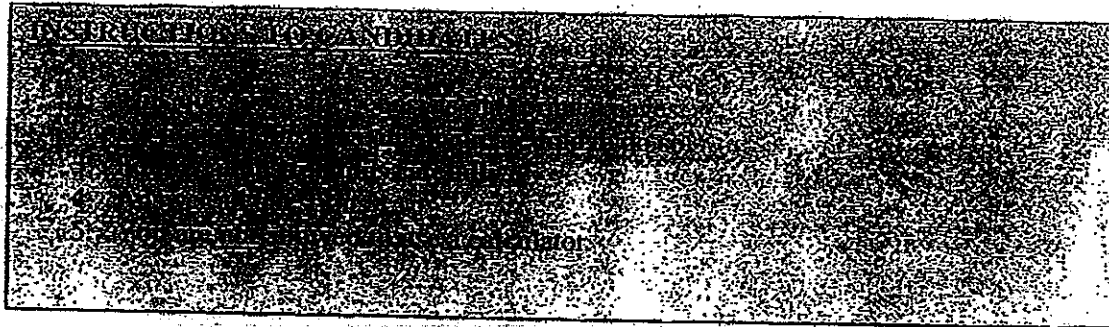


Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2012
MATHEMATICS
PAPER 1 (BOOKLET B)
PRIMARY SIX

Name: _____ () Class: Primary 6 ____

Date: 9 May 2012



Paper 1 Booklet A. Multiple-Choice Questions	20	
Paper 1 Booklet B. Short Answers: Part 1	10	
Paper 1 Booklet B. Short Answers: Part 2	10	
Total Marks	40	

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

16. John has 7m of raffia string. If he needs $\frac{3}{11}$ m of raffia string to tie a parcel. What is the number of parcels he can tie?

Answer: _____

17. When $\frac{2}{3}$ of a number is divided by 8, the answer is 12. What is the number?

Answer: _____

18.

A container can hold 18 litres of orange juice when it is full. If $\frac{3}{4}$ of the container is filled with orange juice, how many 150-ml cups are needed to fill the orange juice from the container?

Answer: _____

19. The length of the sides of a rectangle is $1\frac{1}{2}$ times its breadth. What fraction of the perimeter is its breadth?

Answer: _____

20. Kieran's family consisting of 7 adults and 5 children dined in Delicious Café. For every paying 3 adults, 2 children dine for free. How much do they have to pay if all the family members went for the Lunch buffet ?

Delicious Café's Buffet Lunch:

Child price: \$13.90

Adult price: \$21.90

For promotion deal

Every 3 adults, 2 children dine free

Answer: \$ _____

21. At a stationery shop, there were a total of 120 pens and erasers. There were 3 times as many pens as erasers. After some pens and 12 erasers were sold, the number of erasers left was twice the number of pens. How many pens were sold?

Answer: _____

22. Franklin travelled from Town A to Town B, which is 15000 m apart. If he took $\frac{1}{3}$ h, find his speed for the whole journey.

Answer: _____ km/h

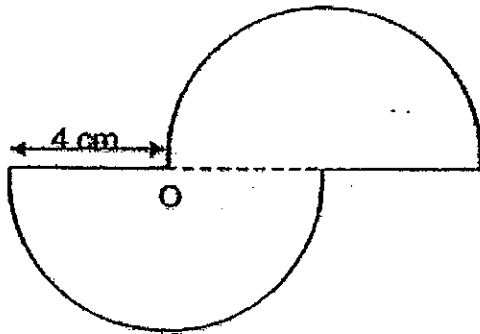
23. Andy had twice as many stamps as Ben. After Andy gave some of his stamps to Ben, both of them had the same number of stamps. If they had a total of w stamps, how many stamps did Andy give to Ben?

Answer: _____

24. Cally and Danny started off at the same time from Town A and drove to Town B at an average speed of 90 km/h and 114 km/h respectively. How far apart would they be after travelling for 50 minutes without stopping?

Answer: _____ km

25. The figure below shows 2 similar semi-circles with a radius of 4 cm. If point O is the centre of the circle, find the perimeter of the figure. Give your answer in terms of π .



Answer: _____ cm

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. Give your answers to the units stated and to its simplest form whenever necessary.

(10 marks)

26. Allin scored an average of 91 for all her 4 subjects. Her average score for English and Math is 96. Given that she scored 10 more marks in Mother Tongue than Science, what was her score for Science?

Answer: _____

27. The ratio of the number of stickers Aaron had to the total number of stickers Benedict and Caleb had was 2 : 3. The ratio of the number of stickers Benedict had to the total number of stickers Aaron and Caleb had was 4 : 5. Find the ratio of the number of stickers Aaron had to the number of stickers Benedict had to the number of stickers Caleb had.

Answer: _____

28. During a sale, 5 plates and 11 bowls cost \$89.20. A plate and a bowl cost \$12.80. Mrs Tan bought 2 plates and 3 bowls. How much did Mrs Tan have to pay?

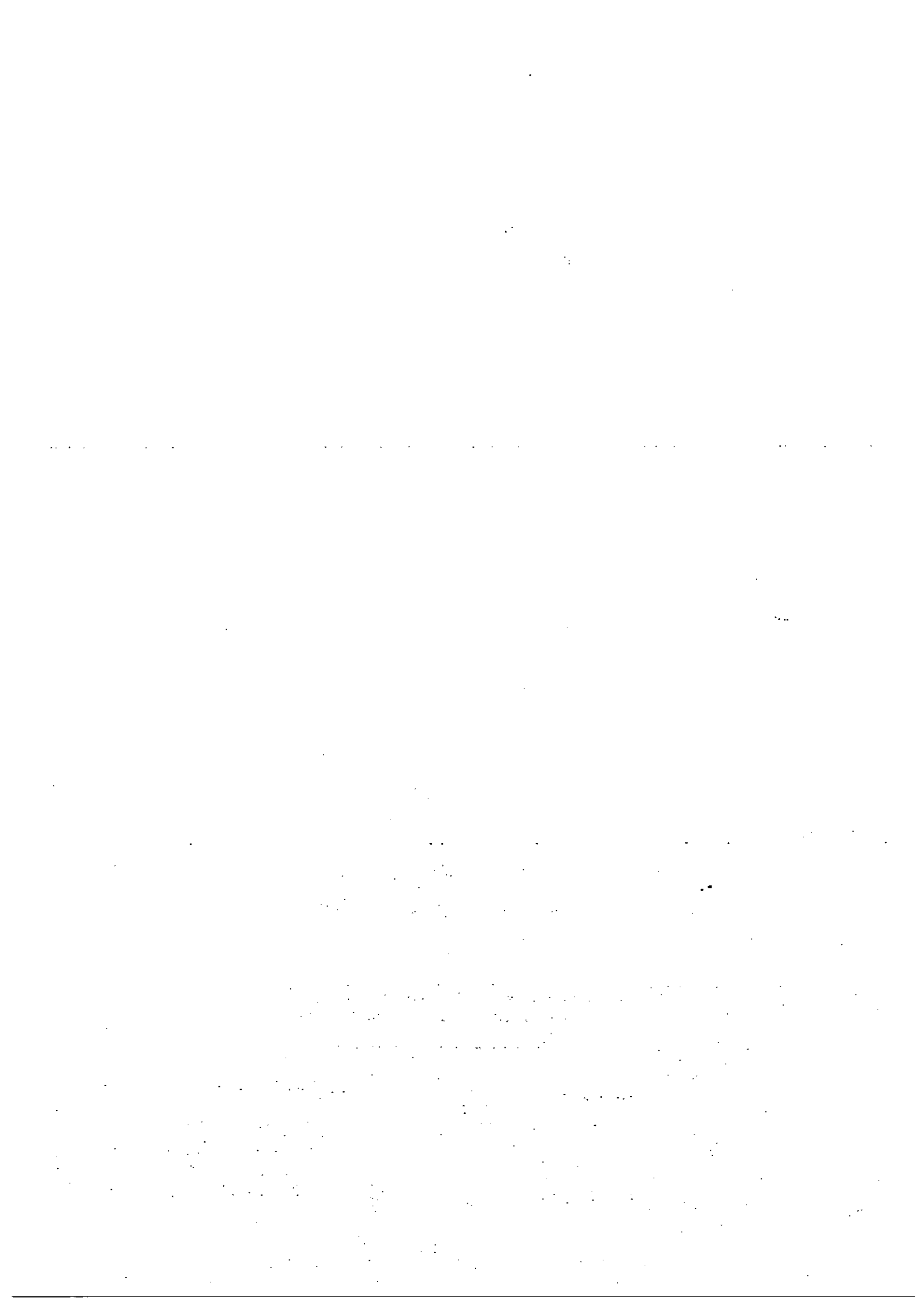
Answer: _____

29. At a sale, Mrs Toh bought some similar T-shirts and paid \$144 after getting a discount of 20%. With the given discount, she was able to buy another 3 more similar T-shirts. How many T-shirts did she buy altogether?

Answer: _____

30. Every Saturday, Mabel will go for her usual exercise. If she runs up 32 steps and walks up 68 steps, she will take 184 seconds. If she runs up 50 steps and walks 50 steps, she will take 175 seconds. If she runs at the same rate throughout the whole exercise, how long will she take to run the 100 steps?

Answer: _____





Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2012
MATHEMATICS
PAPER 2
PRIMARY SIX

Name: _____ () Class: Primary 6 ____

Date: 9 May 2012

Duration of Paper 2: 1h 40min

Parent's/Guardian's signature _____

INSTRUCTIONS TO CANDIDATES
The questions in this paper are to be attempted in Chinese.
You are not allowed to use a calculator.

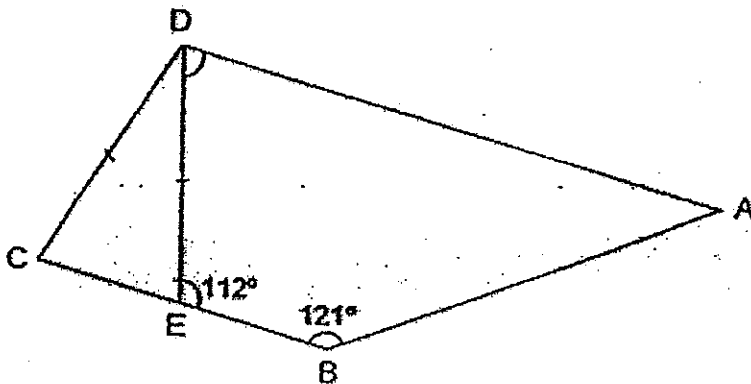
Paper 2 Section B. Short Answers: Part 2	10	
Paper 2 Section C. Problem Sums	50	
Total Marks	60	

Questions 1 to 5 carry 2 marks each. Show your mathematical statements clearly in the space provided for each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

1. Churchill worked 4 months and earned \$12 000. He would receive an additional bonus of \$2 000 for every 5 months he worked. How many years did he have to work to earn \$80 000?

Answer: _____

2. The figure below is not drawn to scale. ABCD is a trapezium. CDE is an isosceles triangle. $\angle ABC = 121^\circ$ and $\angle BED = 112^\circ$. Find $\angle ADE$.



Answer: _____°

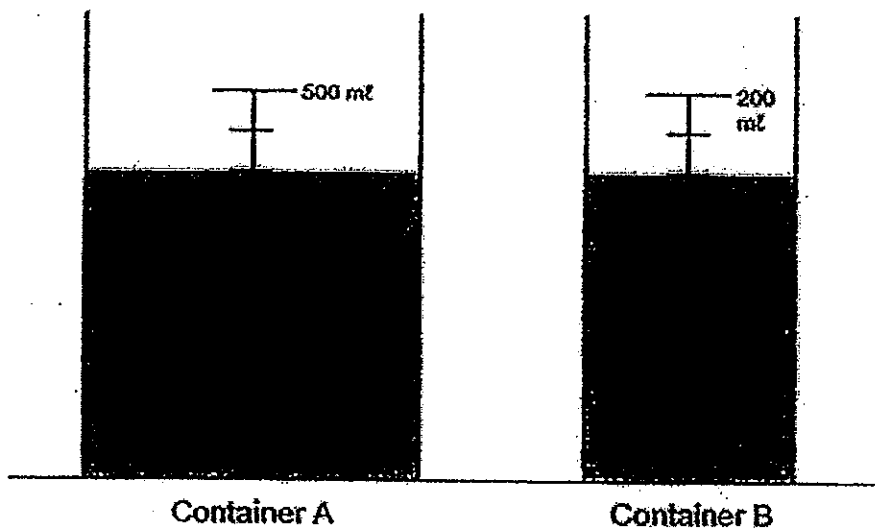
3. For every 55 minutes Mindy exercised, her brother exercised $\frac{3}{4}$ hour more than Mindy. When Mindy exercised for $5\frac{1}{2}$ hours in a week, how many hours had her brother exercised in the same week?
Express your answers in terms of hours.

Answer: _____ h

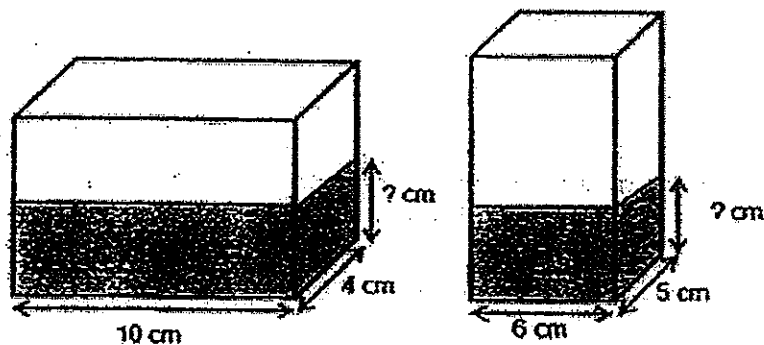
4. May has some flowers. If she arranges 9 flowers in each vase, she will have 6 flowers left. If she arranges 11 flowers in each vase, one of the vases will have only 7 flowers. What is the number of flowers May has?

Answer: _____

5. Containers A and B contained water as shown below.



All the water in Container A and B were poured into 2 empty water tanks, C and D without spilling over. If the heights of the water in both water tanks are the same, what is the height of the water level in Tank C?



Answer: _____

For questions 6 to 18, show your steps 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.

The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

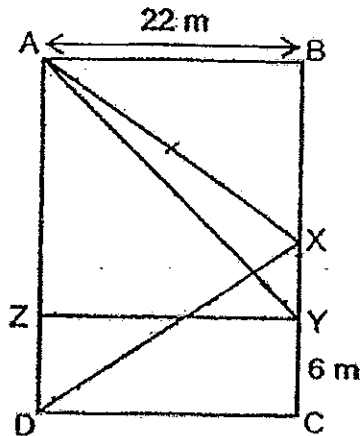
6. Phoebe's annual expenditure is $\frac{2}{5}$ less than Chloe's and $\frac{1}{5}$ more than Denise. If they spent \$34 020 in a year altogether, find Denise's monthly expenditure.

Answer: _____ [3]

7. Kenny had some blue and green pens in the ratio 3 : 4. After he gave away 28 blue pens and bought another 12 green pens, the number of blue pens Kenny has is now $\frac{1}{2}$ the number of green pens. How many green pens did Kenny have at first?

Answer: _____ [3]

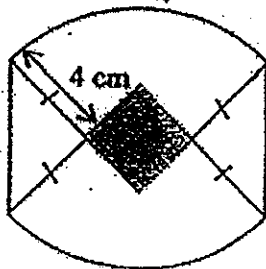
8. The figure below is not drawn to scale. ABCD is a rectangle. AXD is an isosceles triangle and AYZ is a right-angle isosceles triangle. AB = 22 m and CY = 6 m. Find area of triangle AXD.



Answer: _____ [3]

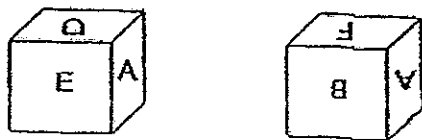
9. The figure below is made up of two quarter circles each of radius 7 cm and two identical right-angled triangles. The shaded part is a square. If the height of the triangle is 4 cm, find the area of the whole figure.

(Take $\pi = \frac{22}{7}$)



Answer: _____ [3]

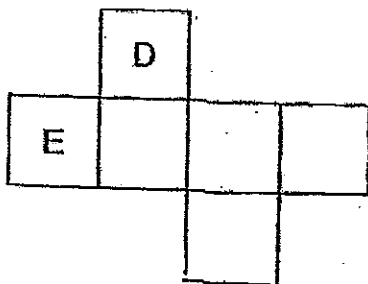
10. The diagrams below show two different orientations of the same dice. The letters on the faces of the dice are A, B, C, D, E and F.



- a) Which face is opposite letter E?

Answer: _____ [1]

- b) Below is a net of the dice. Fill in the missing letters on the net.



Answer: _____ [2]

11. At a pet shop, the price of a hamster is \$y. The price of a rabbit is thrice the price of a hamster. The price of a guinea pig is \$9 less than the price of a rabbit. Gavin spent \$760 on 3 rabbits, 5 guinea pigs and a number of hamsters. Given that the price of a rabbit is \$69, how many hamsters did he buy?

Answer: _____ [4]

12. In an auditorium, 30% of the seats are reserved for the platinum class. The ratio of the number of seats for silver class to the number of seats for gold class is 12 : 13. After the auditorium underwent a renovation, the number of seats in the auditorium is increased by 20%. There are now 1 440 seats reserved for the platinum class.

- a) How many seats are reserved for the silver and gold class after the renovation?
- b) How many seats are reserved for silver class before the renovation?

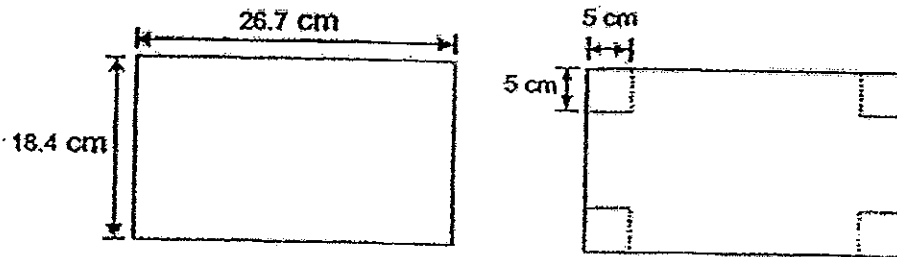
Answer : a) _____ [1]

b) _____ [3]

13. David and his brother John decided to cycle from his home to the library using the same route. They started cycling at the same time. David cycled at a speed of 15 km/h. Both of them did not change their speed throughout the race. When John covered $\frac{1}{3}$ the distance, David was 4.5 km ahead of him. David reached the library at 4.45 pm. What time did John reach the library?

Answer : _____ [4]

14. Billy had a piece of A4-sized paper measuring 26.7 cm by 18.4 cm. He cut out a square of side 5 cm at each of the corner as shown.



Billy then folded the sides up, taping the corners to form an open box as shown below.



- Find the volume of the box.
- Find the maximum number of 2-cm cubes that can fit into the open box.

Answer : a) _____ [2]

b) _____ [2]

15. Aminda bought some red, yellow and blue beads to make a necklace. $\frac{1}{6}$ of the yellow beads were equal to $\frac{3}{4}$ of the red beads. The number of blue beads was $\frac{5}{11}$ of the total number of red and yellow beads. If there were 54 more blue beads than red beads, how many beads did Aminda buy altogether?

Answer: _____ [5]

16. Micah spent half of his money and an additional \$324 on a television. Then he spent $\frac{1}{6}$ of his remaining money and an additional \$55 on a DVD player. Then he spent 0.4 of his remaining money and an additional \$18 on a music player. If he has \$168 left, how much was the television?

Answer: _____ [5]

17. Nicole received more money than Tricia from their mother. 40% of Tricia's money is \$16 less than 25% of Nicole's money. If Nicole gives 35% of her money to Tricia, Nicole will have \$12 less than Tricia.

a) How much money does Tricia has?

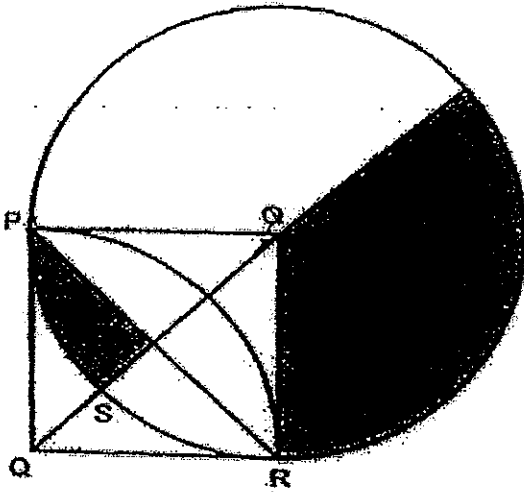
b) How many per cent more money does Nicole has than Tricia at first ?

Round off your answers to the nearest 2 decimal places.

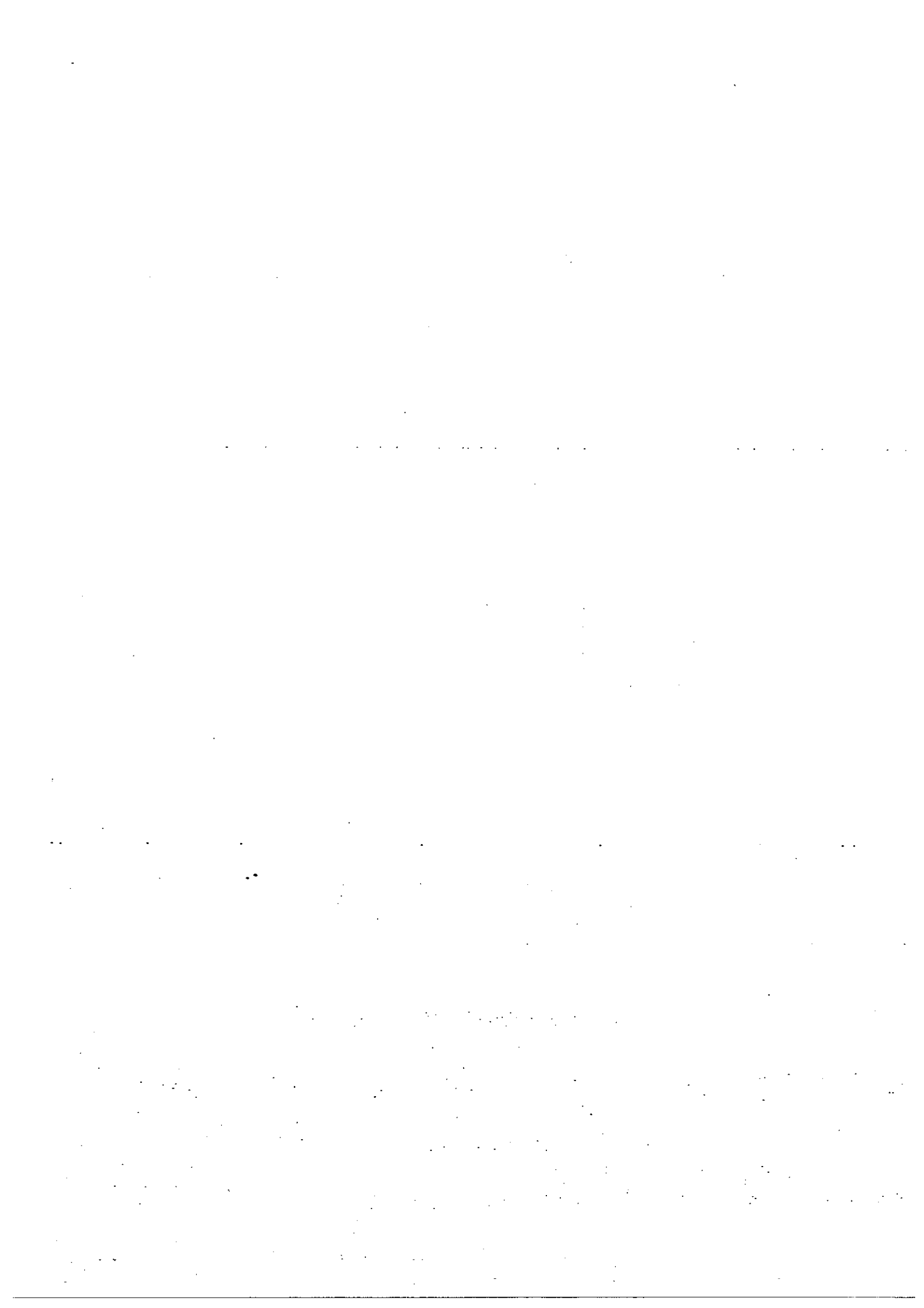
Answer : a) _____ [2]

b) _____ [2]

18. In the figure below, not drawn to scale, O is the centre of the circle. OPQR is a square and OS is 14 cm. Use the calculator value of π to find the shaded area. Round off your answer to the nearest two decimal places.



Answer: _____ [5]



15)288

16) $3u \rightarrow 168 + 18 = 186$

$1u \rightarrow 186 \div 3 = 62$

$5u \rightarrow 62 \times 5 = 310$

$5u \rightarrow 310 + 55 = 365$

$1u \rightarrow 365 \div 5 = 73$

$6u \rightarrow 73 \times 6 = 438$

$438 + 324 = 762$

$762 + 324 = \$1086$

17)a) $35\% \times (8\pi + 64) = 2.8\pi + 22.40$

$8\pi + 64 - 2.8\pi + 22.4 = 5.2\pi + 41.60$

$5\pi + 2.8\pi + 22.4 = 7.8\pi + 22.40$

$5.2\pi + 41.60 + 12 = 7.8\pi + 22.40$

$5.2\pi + 53.60 = 5.2\pi + 53.60$

$7.8\pi - 5.2\pi = 53.60 - 22.40$

$2.6\pi = 31.20$

$1\pi = 31.20 \div 2.6 = 12$

$5\pi = 12 \times 5 = 60$

b) $100\% N \rightarrow 160\% T + 64$

$= 60 \times 1.6 + 64$

$= 96 + 64 = 160$

$160 - 60 = 100$

$100/60 \times 100 = 166.667 \approx 166.67\%$

18) Area of guardant = $\frac{1}{4} \times \pi \times 14 \times 14 = 153.9380$

$(153.9380 \div 2 \times 3) = 230.9070$

Area of square $\rightarrow 14 \times 14 = 196$

$196 - 153.9380 = 42.0619$

$196 - (42.0619) = 111.8760$

$111.8760 \div 4 = 27.9690$

$27.9690 + 230.9070 = 258.8760 \approx 258.88 \text{ cm}^2$