2024 P6 MATHEMATICS PRACTICE PAPER 3

Name: _____ ( ) Date: 8 May 2024

Class: Primary 6 ( ) Duration: 1 hour

Parent's Signature: _____ Marks: _____ / 100

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS
PAPER 1
(BOOKLET A)

20

INSTRUCTIONS TO CANDIDATES

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. Use a 2B pencil to shade your answers on the Optical Answer Sheet (OAS).
6. The use of calculators is **NOT** allowed.

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) and shade your answer on the Optical Answer Sheet.

(20 marks)

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1 Which of the following is thirty-five thousand and twenty in numerals?

(1) 3520

(2) 35 020

(3) 35 200

(4) 350 020

2 Round 6.785 to 2 decimal places.

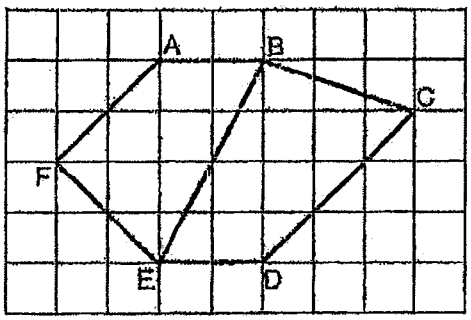
(1) 6.70

(2) 6.78

(3) 6.79

(4) 6.80

3 Which line in the square grid is parallel to AF?



(1) AB

(2) BE

(3) CD

(4) EF

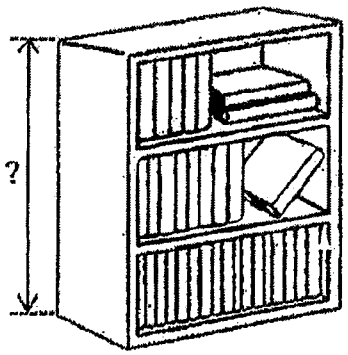
4 The diagram shows a bookshelf in a school library.
Which of the following could be the height of the bookshelf?

(1) 1 cm

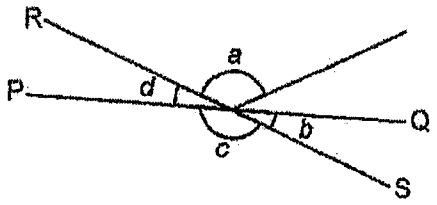
(2) 5 cm

(3) 1 m

(4) 5 m



5 PQ and RS are straight lines.



Which of the following is true?

(1) $\angle a = \angle c$

(2) $\angle b = \angle d$

(3) $\angle a + \angle d = 180°$

(4) $\angle a + \angle c = 180°$

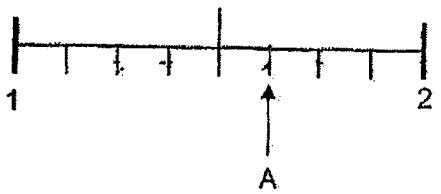
6 In the number line, what is the mixed number represented by A?

(1) $1\frac{2}{3}$

(2) $1\frac{3}{4}$

(3) $1\frac{5}{7}$

(4) $1\frac{5}{8}$



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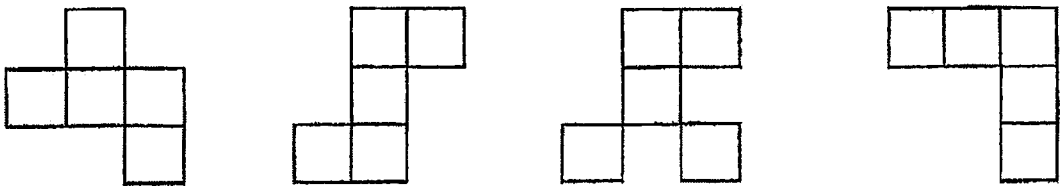
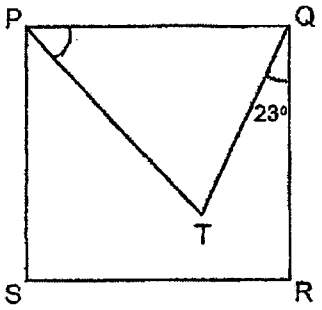
7 Each figure is made up of 5 identical squares. Which one has a line of symmetry?



(1) (2) (3) (4)

8 PQRS is a square and PQ = PT. Find ∠TPQ.



(1) 67°

(2) 60°

(3) 46°

(4) 45°

9 Mr Lim had \$50. After buying 4 identical ties, he had \$$x$ left.
How much did Mr Lim pay for each tie?

(1) $\$(50-4x)$

(2) $\$(50-\frac{x}{4})$

(3) $\$(\frac{50-x}{4})$

(4) $\$(\frac{50x}{4})$

10 Arrange these distances from the shortest to the longest.

1.25 km	1 km 205 m	$1\frac{2}{5}$ km

	Shortest		Longest
(1)	1 km 205 m	$1\frac{2}{5}$ km	1.25 km
(2)	1 km 205 m	1.25 km	$1\frac{2}{5}$ km
(3)	1.25 km	1 km 205 m	$1\frac{2}{5}$ km
(4)	$1\frac{2}{5}$ km	1.25 km	1 km 205 m

11 In the television guide shown, one programme leads to another without any break in between.

Start Time	Programme
9.00 a.m.	Cartoon
10.10 a.m.	Music
11.30 a.m.	Sports
12.20 p.m.	News

How much longer is the Music programme than the Sports programme?

(1) 30 min

(2) 50 min

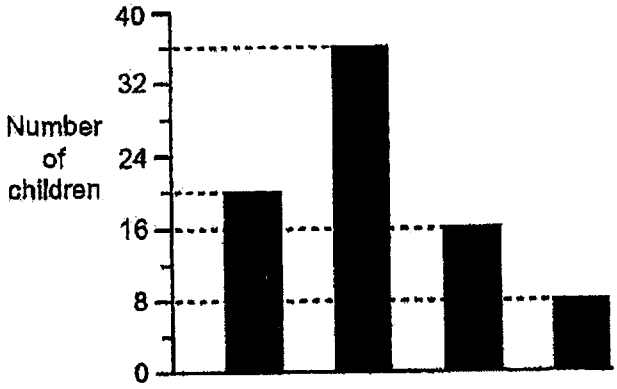
(3) 1 h 10 min

(4) 1 h 20 min

(Go on to the next page)

12 A group of children was asked to choose one fruit from Apple, Mango, Orange and Pear. The table represents the children's choices. The children's choices were also represented by a bar graph but the names of the fruits were not shown.

Fruit	Percentage of children
Apple	10%
Mango	20%
Orange	25%
Pear	45%



What was the total number of children who chose Apple and Orange?

(1) 28

(2) 35

(3) 36

(4) 45

13 Figure 1 shows a rectangular tile with a perimeter of 14 cm.
Figure 2 is formed using 5 such tiles.

Figure 1

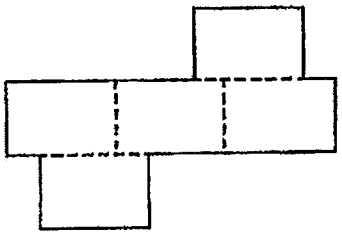


Figure 2

Find the perimeter of Figure 2.

(1) 42 cm

(2) 49 cm

(3) 56 cm

(4) 70 cm

14 A florist had some roses and tulips. She sold $\frac{1}{3}$ of the roses and $\frac{4}{9}$ of the tulips. $\frac{7}{11}$ of the flowers sold were roses. What fraction of the flowers did the florist sell?

(1) $\frac{11}{21}$

(2) $\frac{11}{27}$

(3) $\frac{11}{30}$

(4) $\frac{11}{36}$

15 The pupils at a camp are divided into Group A and Group B. The ratio of the number of boys to girls in Group A is 5 : 4. The ratio of the number of boys to girls in Group B is 5 : 1. There are 3 times as many pupils in Group B as in Group A.

Which of the following could be the total number of boys in both groups?

(1) 17

(2) 30

(3) 40

(4) 55

2024 P6 MATHEMATICS PRACTICE PAPER 3

Name: _____ ( ) Date: 8 May 2024

Class: Primary 6 ( ) Duration: 1 hour

Parent's Signature: _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS
PAPER 1
(BOOKLET B)

25

INSTRUCTIONS TO CANDIDATES

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. Show your working clearly.
5. Write your answers in this booklet.
6. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
7. Do not use correction fluid/tape or highlighters on any part of your answers.
8. The use of calculators is **NOT** allowed.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

Do not write in this space

16 Round 13 845 to the nearest hundred.

Ans: _____

17 Write down all the common multiples of 4 and 6 that are smaller than 30.

Ans: _____

18 Find the value of $\frac{3}{4} \div 15$

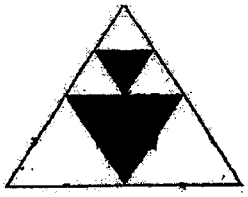
Give your answer as a fraction in the simplest form.

Ans: _____

19 Devi has \$10. She spends 95¢ on a bun and 60¢ on a drink.
How much money does Devi have left?

Ans: \$ _____

20 The figure is made up of equilateral triangles.
What fraction of the figure is shaded?



Ans: _____

Questions **21** to **30** 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. (20 marks)

Do not write in this space

21 Find the value of each of the expressions when $m = 5$.

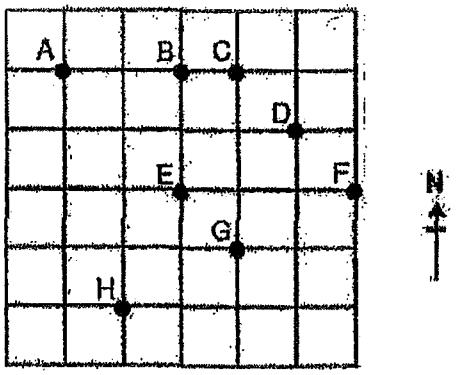
(a) $7m + 6$

(b) $2m - \frac{m}{9}$

Ans: (a) _____

(b) _____

22

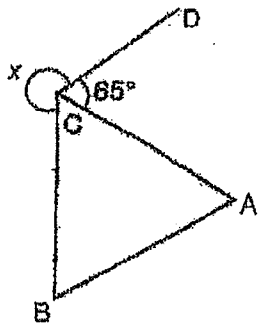


In the square grid,

(a) point _____ is west of point B.

(b) point D is north-east of point _____.

23 ABC is an equilateral triangle. Find $\angle x$.



Ans: _____ °

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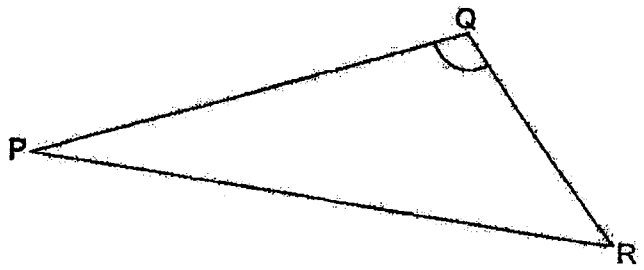
24 Measure and write down

(a) the length of PR to the nearest 0.1 cm.

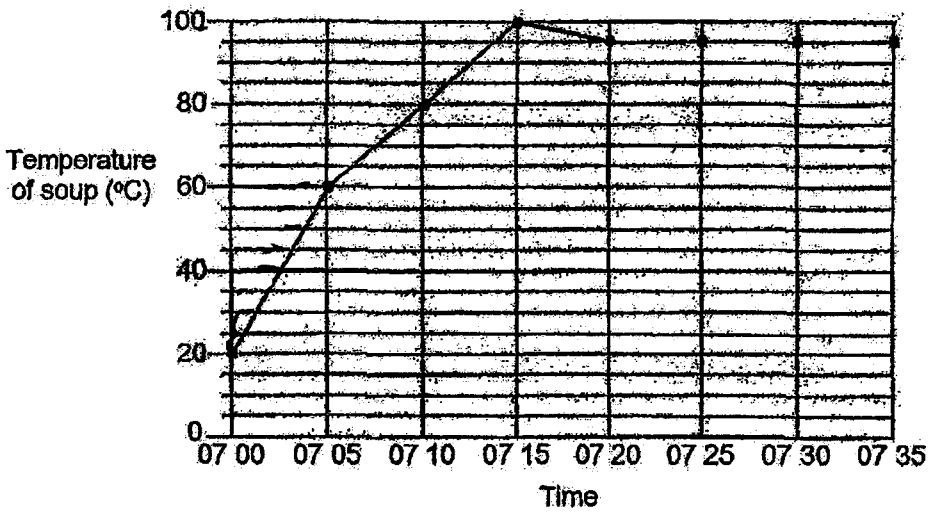
(b) the size of ∠PQR.



Ans: (a) _____ cm

(b) _____ °

25 The line graph shows the temperature of soup in a pot from 07 00 to 07 35.



(a) What was the temperature of the soup at 07 30?

(b) What was the increase in temperature per minute over the first 5 minutes?

Ans: (a) _____ °C

(b) _____ °C/min

26 What is the percentage discount for the bag shown?

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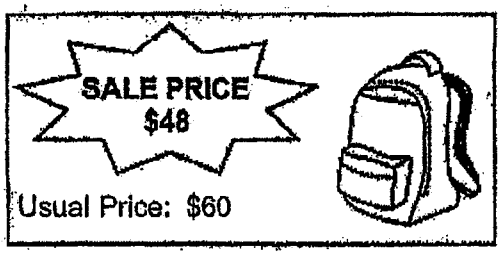


Ans: _____ %

27 The table shows the number of storybooks read by each pupil in a group. Part of the table is covered by an ink blot. There were 45 pupils who read at least 2 storybooks.

Number of storybooks	0	1	2	3	4
Number of pupils	7	8	20		

Each of the statements is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
7 pupils did not read any storybooks.			
There were 80 pupils in the group.			
The number of pupils who read 3 storybooks was equal to the number of pupils who read 4 storybooks.			

(Go on to the next page)

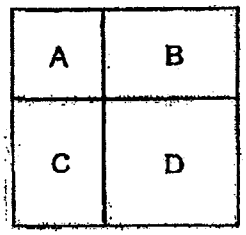
28 A roll of tape has stars and hearts printed in a repeated pattern.

Do not write in this space

Mabel cuts a piece of tape from the roll. In that piece, there are 135 stars. Find the possible numbers of hearts on that piece of tape.

Ans: _____

29 The figure shows a square divided into two smaller squares A and D and two rectangles B and C. The total perimeter of rectangles B and C is 48 cm. The area of square A is 25 cm^2.



What is the area of square D?

Ans: _____ cm^2

30 A trapezium ABCD and a right-angled triangle ABE are drawn on a square grid inside a box.

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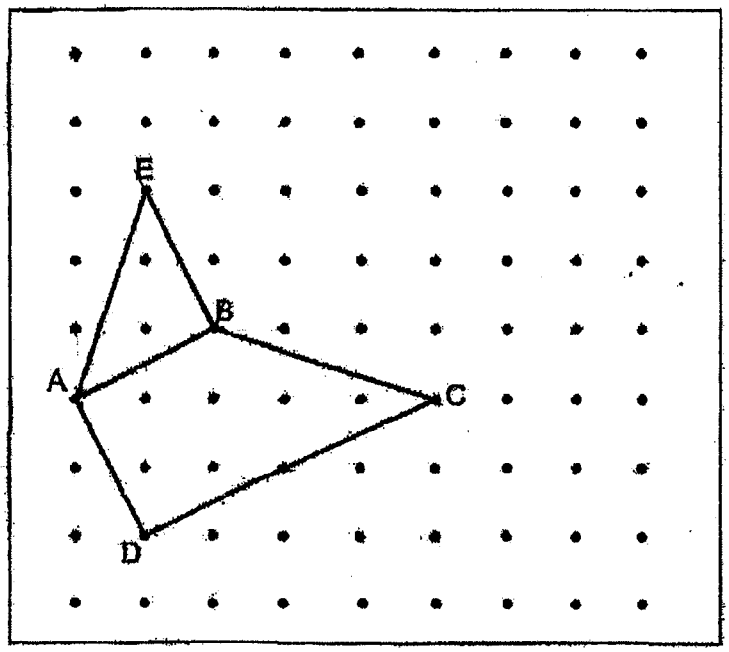


By joining dots on the grid with straight lines,

(a) draw another trapezium ABCF such that AF is longer than BC.

(b) draw another triangle ABG such that it has the same area as triangle ABE. Triangle ABG must not overlap with trapezium ABCD.

2024 P6 MATHEMATICS PRACTICE PAPER 3

Name: _____ ( ) Date: 8 May 2024

Class: Primary 6 ( ) Duration: 1 hour 30 minutes

Parent's Signature: _____

MATHEMATICS
PAPER 2

55

INSTRUCTIONS TO CANDIDATES

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. Show your working clearly.
5. Write your answers in this booklet.
6. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
7. Do not use correction fluid/tape or highlighters on any part of your answers.
8. The use of an approved calculator is allowed.

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)

Do not write in this space

1 Use all the digits 2, 3, 5, 8 to form

(a) the smallest multiple of 5

(b) the greatest number between 3000 and 4000

Ans: (a) _____

(b) _____

2 The table shows the times taken by four boys to complete a race.

Name	Time in seconds
Dinesh	14.1
Ismail	15.0
Ming	13.8
Paul	13.9

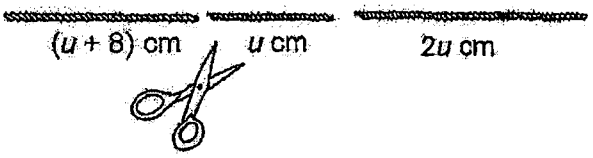
(a) Who was first in the race?

(b) What was the average time taken by the 4 boys to complete the race?

Ans: (a) _____

(b) _____ s

3 Matthew has a rope which is 64 cm long. He cuts it into three pieces. The lengths of the three pieces of rope are as shown. Find the value of u.



Ans: _____

4 Shanti took a taxi from home to her office.
Her taxi fare was based on the charges shown.

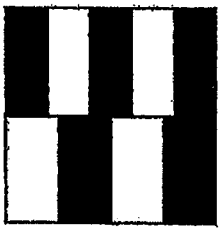
Do not write in this space

First 1 km	$3.20
Every additional 400 m or less	$0.22
Every 45 seconds of waiting or less	$0.22

The taxi stopped once at a traffic light for 1 min and travelled a total distance of 5.8 km to reach Shanti's office. How much was her taxi fare?

Ans: $_____

5 A square is first divided into two equal halves. The top half is divided into 5 equal parts while the bottom half is divided into 4 equal parts.



The total area of the shaded parts is 165 cm^2. What is the area of the square?

Ans: _____ cm^2

(Go on to the next page)

For questions 6 to 17, 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. (45 marks)

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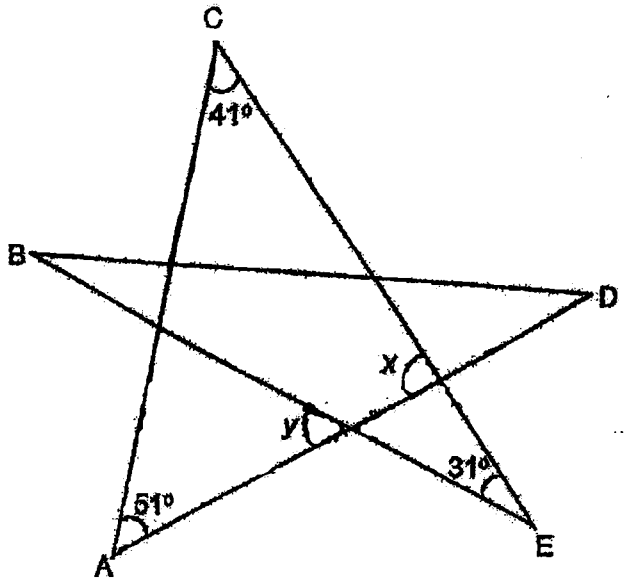
6 The figure is formed by five straight lines AC, AD, BD, BE and CE.



(a) Find $\angle x$.

(b) Find $\angle y$.

Ans: (a)_____ [1]

(b)_____ [2]

7 Lucy had an equal number of gold stars and silver stars. She gave 26 gold stars and 14 silver stars to Maggie. She gave the remaining stars to Nick. Nick was given 1 gold star for every 3 silver stars. How many stars did Lucy have at first?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

8 On Friday, the ratio of the number of adults to boys to girls visiting a zoo was 7 : 6 : 5. On Saturday, the number of adults visiting the zoo remained the same. However, the number of boys increased by 50% and the number of girls decreased by 40%.

Do not write in this space

(a) What was the ratio of the number of adults to boys to girls visiting the zoo on Saturday?

(b) On Friday, 627 boys and girls visited the zoo. What was the total number of visitors at the zoo on Saturday?

Ans: (a)_____ [1]

(b)_____ [2]

9 ABCD is a rhombus. DFB and DECG are straight lines.

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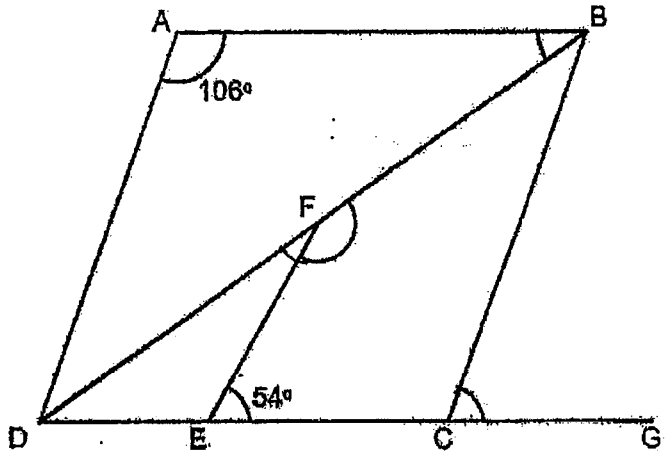

(a) Find ∠ABD.

(b) Find ∠GCB.

(c) Find ∠EFB.

Ans: (a)_____ [1]

(b)_____ [1]

(c)_____ [2]

(Go on to the next page)

10 Shops A and B sell files of four colours. The bar graphs show the number of files sold by each shop in January.

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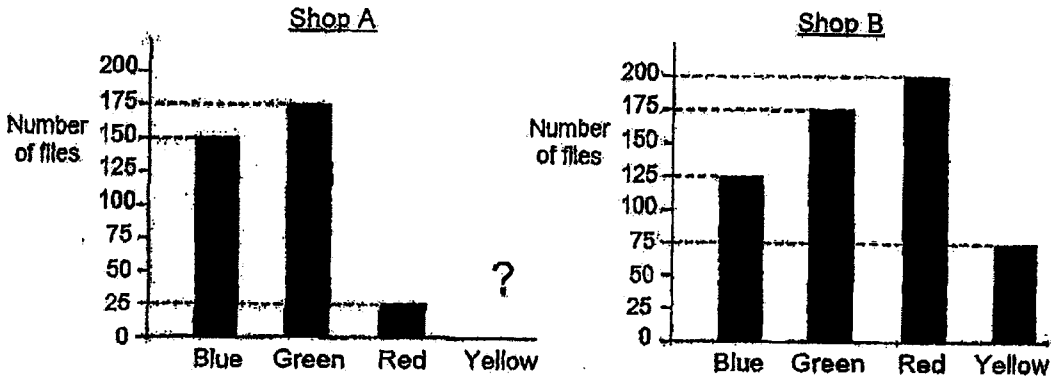
The bar for the number of yellow files sold by Shop A has not been drawn.



(a) Half of the files sold by Shop A were yellow files. How many yellow files did Shop A sell?

(b) Which colour(s) of files did Shop A sell more than Shop B?

(c) In February, Shop B sold 105 more blue files than the number of blue files sold in January. What was the percentage increase in the number of blue files sold by Shop B from January to February?

Ans: (a)_____ [1]

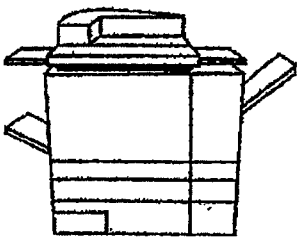
(b)_____ [1]

(c)_____ [2]

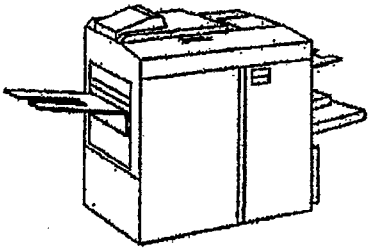
11 The photocopying rates of two machines, P and Q are as shown.

Do not write in this space

P: 2 pages per second



Q: 7 pages every 5 seconds



Both machines were used to make a copy of a set of notes which had been divided into Part 1 and Part 2. Machine P took 7 minutes to photocopy Part 1 and Machine Q took 8 minutes to photocopy Part 2.

(a) How many pages were there altogether in the set of notes?

(b) Another copy of the same set of notes was made using Machine Q only. How many minutes did Machine Q take?

Ans: (a)_____ [2]

(b)_____ [2]

12 The figure is formed by two identical circles with centres at A and C. ABCD is a square and the length of AB is 15 cm.

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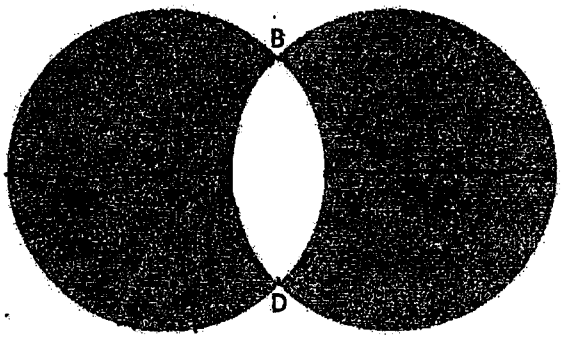

(a) Find the perimeter of the unshaded part.

(b) Find the total area of the shaded parts.

(Take $\pi = 3.14$)

Ans: (a)_____ [1]

(b)_____ [3]

13 Mr Lim had blue pens and red pens for sale. He sold 270 blue pens. 25% of the pens sold were red.

Do not write in this space

(a) How many blue pens and red pens did Mr Lim sell altogether?

(b) He sold 40% of his pens. 30% of the pens left unsold were blue. How many red pens did Mr Lim have at first?

Ans: (a)_____ [1]

(b)_____ [3]

(Go on to the next page)

14 Andy saved a total of \$108 in coins in his coin box. $\frac{2}{3}$ of all the coins saved were one-dollar coins. There were 3 times as many one-dollar coins as fifty-cent coins. The remaining coins were twenty-cent coins. How many coins did Andy save in his coin box altogether?

Do not write in this space

Ans: _____ [3]

15 Cassie hung some identical rings vertically as shown.
The thickness of each ring was 1 cm.

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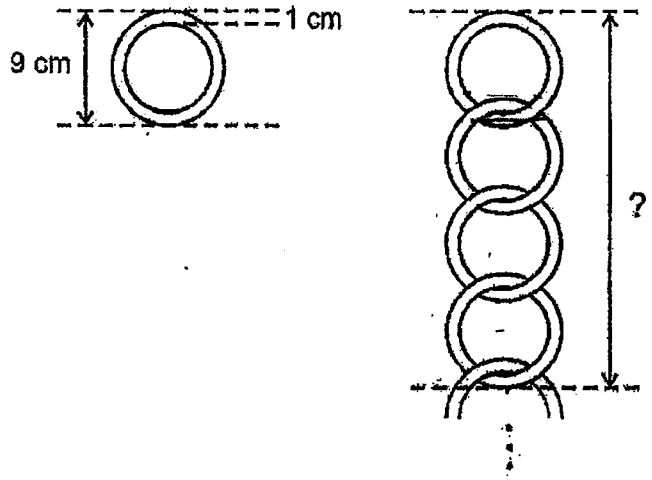


(a) What was the distance from the top of the 1st ring to the bottom of the 4th ring?

(b) The distance from the top of the 1st ring to the bottom of the last ring was 198 cm. How many rings did Cassie hang altogether?

Ans: (a) _____ [1]

(b) _____ [2]

(Go on to the next page)

16 In Figure 1, PQRS is a rectangular piece of paper. After 6 identical triangles are cut out from the paper, the remaining paper is shown in Figure 2. The area of the remaining paper is 279 cm^2.

Do not write in this space

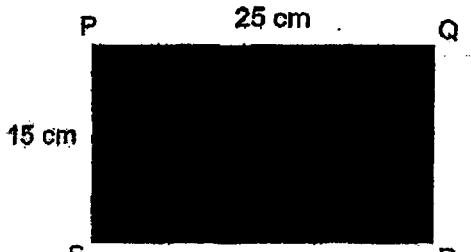


Figure 1

Figure 2

(a) What is the area of each triangle that was cut out?

(b) The perimeter of Figure 2 is 54 cm longer than the perimeter of Figure 1. What is the perimeter of each triangle?

Ans: (a) _____ [2]

(b) _____ [3]

17 Mrs Wu spent $\frac{1}{6}$ of her money on a dress and 2 blouses. The dress cost 3 times as much as each blouse. Mrs Wu spent $\frac{3}{4}$ of her remaining money on a watch. She spent \$220.50 more on the watch than on the dress.

Do not write in this space

(a) What fraction of Mrs Wu's money was spent on each blouse?

(b) How much money did Mrs Wu have at first?

Ans: (a) _____ [1]

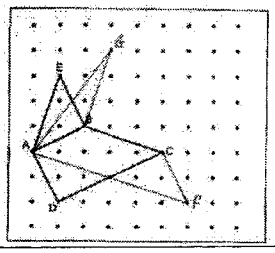
(b) _____ [4]

End of Paper

SCHOOL : TAO NAN SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2024 SA1

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

Q16)	13800
Q17)	12, 24
Q18)	$\frac{1}{20}$
Q19)	$8.45
Q20)	$\frac{5}{16}$
Q21)	a)5 x 7 + 6 = 41 b)$9\frac{4}{9}$
Q22)	a) A b) H
Q23)	<360 – 60 – 65 = 235°
Q24)	a)8.0 cm b)109°
Q25)	a)95°C b)8°C/min
Q26)	20%
Q27)	True False False
Q28)	54

Q29) 48 – 5 – 5 – 5 – 5 =28 28 ÷ 4 = 7 7 x 7 = 49 cm2
Q30) a),b) 

1) (a) 2385
(b) 3852

2) (a) Ming
(b) 14.2

3) $u+8+u+2u=64$
$4u+8=64$
$4u=56$
$u=14$

4) First 1km = \$3.20
Remaining 4.8km = $4800m \div 400m \times 0.22$
= \$2.64
1min waiting = 0.22×2
= \$0.44

\$3.20 + \$2.64 + \$0.44 = \$6.28

5) Top half = $\frac{1}{2} \times \frac{3}{5}$
$= \frac{3}{10}$
Bottom half = $\frac{1}{2} \times \frac{1}{2}$
$= \frac{1}{4}$

$\frac{3}{10} \times \frac{2}{2} + \frac{1}{4} \times \frac{5}{5} = \frac{6}{20} + \frac{5}{20}$
$= \frac{11}{20}$

$\frac{11}{20} \Rightarrow 165cm^2$
$\frac{20}{20} \Rightarrow 165 \div \frac{11}{20}$
$= 165 \times \frac{20}{11}$
$= 300cm^2$

6) (a) $\angle x = 180° - 51° - 41°$
$= 88°$

(b) $\angle a = 180° - 88°$
$= 92°$
$\angle y = 180° - 92° - 31°$
$= 57°$

7) G [ ] − 26 | 6+26=32
S [ ] − 14 | 18+14=32

G : S	Difference
1 : 3	3−1=2
6 : 18	26−14=12

×6 ↓ ×6

∴ 32+32=64

	A	B	G
8) Friday	7	6	5
Saturday	same	↑50%	↓40%

(a) $6 \times \frac{50}{100} = 3$ $5 \times \frac{40}{100} = 2$
$6+3=9$ $5-2=3$

∴ 7 : 9 : 3

(b)

B : G	Sum
6 : 5	11
	627

×57

$11 \overline{)627}$ 55 77 77

$(7+9+3) \times 57 = 19 \times 57$
$= 1083$

9) (a) $\angle ABD = (180° - 106°) \div 2$
$= 37°$

(b) $\angle ADF = 37°$
$\angle GCB = 180° - 106°$
$= 74°$

(c) $\angle FDE = 180° - 106° - 37°$
$= 37°$
$\angle DFE = 180° - 37° - 126°$
$= 17°$
$\angle EFB = 180° - 17°$
$= 163°$

10) (a) 150+175+25=350

(b) Blue

(c) $\frac{105}{125} \times 100\%$
$= 84\%$

11) P : 2 pages/s → 7 min
Q : 7 pages/5s → 8 min

(a) $7 \times 60 \times 2 = 840$
$8 \times 60 \times 7 \div 5 = 672$
$840+672=1512$

(b) $1512 \div 7 \times 5 = 1080s$
$1080 \div 60 = 18min$

12) (a)  $\frac{90}{360} \times 2 \times 3.14 \times 15 \times 2$

$= 47.1 cm$

(b)  $\frac{90}{360} \times 3.14 \times 15^2 = 176.625 cm^2$

 $\frac{1}{2} \times 15 \times 15 = 112.5 cm^2$

 $176.625 - 112.5 = 64.125 cm^2$

 $15 \times 15 - 64.125 \times 2 = 96.75 cm^2$

 $\frac{270}{360} \times 3.14 \times 15^2 \times 2 = 1059.75 cm^2$

$\therefore 1059.75 cm^2 + 96.75 cm^2 = 1156.5 cm^2$

13) B $\Rightarrow$ 270

R $\Rightarrow$ 25%

(a) $270 \times \frac{100}{75} = 360$

(b) Sold : $360 \times \frac{100}{40} = 900$ (total)

$900 - 360 = 540$ (unsold)

$\frac{70}{100} \times 540 = 378$ (unsold red)

$378 + \frac{25}{100} \times 360 = 468$

14) \$1 : □□□ $= \frac{2}{3}$

\$0.50 : □

\$0.20 :

\$1 : □·□·□·□·□·□ $= \frac{2}{3}$

\$0.50: □□ $= \frac{2}{9}$

\$0.20: □ $= 1 - \frac{2}{3} - \frac{2}{9} = \frac{1}{9}$

□□□□□□ $= \frac{2}{3}$

□□□ $= \frac{1}{3} = \frac{2}{6} = \frac{3}{9}$

□ $= \frac{1}{9}$

Let 1 Δ = 10¢

\$1 : 60 Δ ┐

\$0.50: 10 Δ ├ 72Δ

\$0.20: 2 Δ ┘

\$108 ÷ 72 = 1.5

1.5 × 10 × 9 = 135

15) (a) $9 + 7 + 7 + 7 = 30 cm$

(b) $198 - 9 = 189$

$189 \div 7 = 27$

$27 + 1 = 28$

16) (a) $(15 \times 25 - 279) \div 6 = 16 cm^2$

(b) Perimeter of F1 $= 25 + 15 + 25 + 15$

$= 80 cm$

Perimeter of F2 $= 80 cm + 54 cm$

$= 134 cm$

$134 - 25 - 25 = 84 cm$

$84 \div 6 = 14 cm$

$> = 14 cm$

$| = 15 cm \div 3 = 5 cm$

$\therefore 14 + 5 = 19 cm$

17) $\frac{1}{6}$ → dress & 2 blouses

D : □□□ $\frac{1}{6} - \frac{1}{15} = \frac{1}{10}$

B : □□ $\frac{1}{6} \div 5 = \frac{1}{30}$

$\therefore \frac{1}{30}$

(b) Watch $= \frac{5}{6} \times \frac{3}{4}$

$= \frac{5}{8}$

D : W

$\frac{1}{10} : \frac{5}{8}$

$\frac{4}{40} : \frac{25}{40}$

4 : 25

\$20.50 ÷ 21 = \$10.5

D: \$10.50 × 4 = \$42

$\therefore$ \$42 × 10 = \$420