



Rosyth School
First Continual Assessment 2008
Mathematics
Primary 6

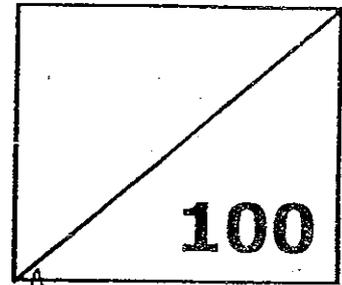
Name: _____

Class: Pr 6-_____ Register No. _____

Duration for Booklets A & B: **2 hours 15 min**

Date: 20 February 2008

Parent's Signature: _____



BOOKLET A

Instructions to Pupils:

1. Do not open any booklet until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets.
 - Booklet A consists of Section A. Booklet B consists of Sections B and C.
4. For questions 1 to 15 in Section A, shade the correct ovals on the Optical Answer Sheet (OAS).
5. ANSWER ALL QUESTIONS.

	Maximum	Marks Obtained
Section A	20	

* Booklet A consists of 6 pages altogether.

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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 answer on the OAS (Optical Answer Sheet). (20 marks)

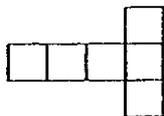
1) Which one of the following numbers when rounded to the nearest ten is 64 800?

- (1) 64 803
- (2) 64 806
- (3) 64 813
- (4) 64 816

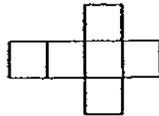
2) Oranges were sold at 5 for \$2. How much change did Mrs Tan get if she paid the cashier \$50 for 30 oranges?

- (1) \$10
- (2) \$12
- (3) \$20
- (4) \$38

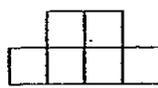
3) Which of the following is **not** a net for a cube?



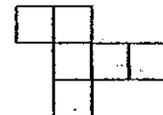
A



B



C



D

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

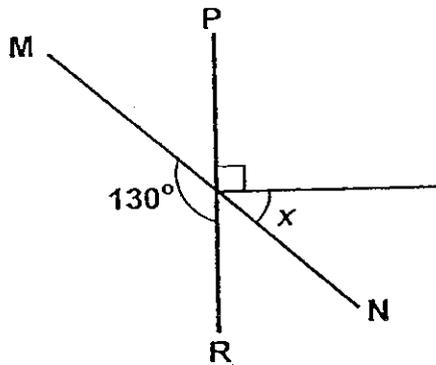
4) Find the value of $30 - 2v$ when $v = 4$.

- (1) 6
- (2) 22
- (3) 24
- (4) 26

5) Simplify $10a + 20 - 5a + 5$.

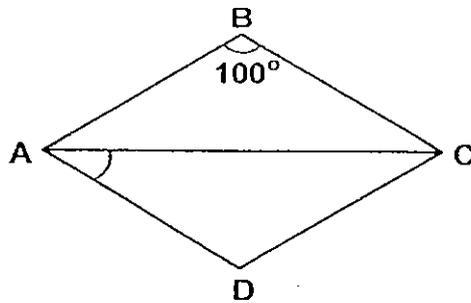
- (1) $5a + 15$
- (2) $5a + 25$
- (3) $15a + 15$
- (4) $15a + 25$

6) MN and PR are straight lines. Find $\angle x$ in the figure shown.



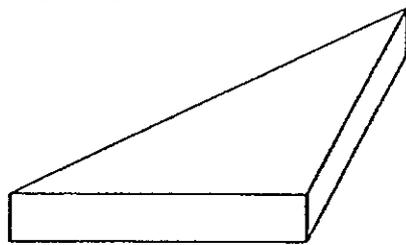
- (1) 30°
- (2) 40°
- (3) 45°
- (4) 50°

- 7) ABCD is a rhombus, with $\angle ABC = 100^\circ$. Find $\angle DAC$ in the figure shown.



- (1) 20°
- (2) 40°
- (3) 50°
- (4) 60°

- 8) The figure shows a solid.



How many triangular faces does it have?

- (1) 1
- (2) 2
- (3) 3
- (4) 5

9) If Jia Hui's savings is $\frac{5}{6}$ of Denise's savings, what is the ratio of Jia Hui's savings to their total savings?

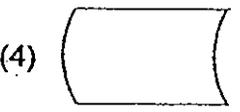
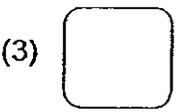
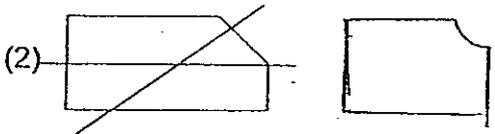
(1) 5 : 6

(2) 5 : 11

(3) 6 : 5

(4) 6 : 11

10) Which of the following shapes can tessellate?



- 11) The table below shows the marks scored by four students in a Mathematics test. The average mark scored by them was 79.

Student	Min Ting	Don	Karen	Darren
Marks scored	81	?	65	? 85

If Darren scored 6 marks more than the average score, what was Don's score?

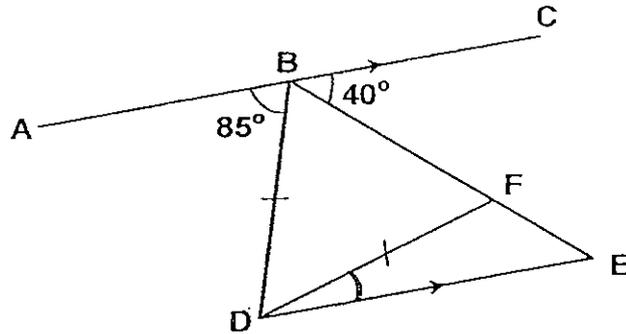
- (1) 80
(2) 82
(3) 85
(4) 88
- 12) A vase is $\frac{3}{4}$ full of water. This amount is equivalent to 5 cupfuls of water. When 2 full cups of water are poured out, what fraction of the vase is still filled with water?

- (1) $\frac{3}{5}$
(2) $\frac{3}{10}$
(3) $\frac{9}{10}$
(4) $\frac{9}{20}$

- 13) Miss Danker baked some cookies. She gave $\frac{1}{10}$ of them to her ^{mother} friends. Her friends ate 36 pieces. She was then left with $\frac{3}{4}$ of the cookies she had made. How many cookies did she have left?

- (1) 48
(2) 180
(3) 240
(4) 480

- 14) In the figure below, ABC is a straight line and BC is parallel to DE. Find $\angle FDE$.



- (1) 15°
(2) 55°
(3) 70°
(4) 85°
- 15) $\frac{1}{4}$ of Gerald's money is $\frac{1}{3}$ of Hakim's money. What is the ratio of Gerald's money to Hakim's money?

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

~~~~~END OF BOOKLET A~~~~~



Rosyth School  
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Mathematics  
Primary 6

Name: \_\_\_\_\_

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Date: 20 February 2008

Parent's Signature: \_\_\_\_\_

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## BOOKLET B

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. This booklet consists of Sections B and C.
4. For questions 26 to 48, show all relevant working in the spaces provided.
5. ANSWER ALL QUESTIONS.

|                  | Maximum | Marks Obtained |
|------------------|---------|----------------|
| <b>Section B</b> | 30      |                |
| <b>Section C</b> | 50      |                |
| <b>Sub-Total</b> | 80      |                |

\* Booklet B consists of 16 pages altogether.

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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) Find the value of  $81 \div (4 + 5) - (3 \times 2)$

Ans: \_\_\_\_\_

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17) How many fifths are there in  $4\frac{4}{5}$ ?

Ans: \_\_\_\_\_

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18) A fraction when multiplied by 5 and then divided by 6 will give a result of  $\frac{3}{8}$ . What is the fraction? Express the answer in its simplest form.

Ans: \_\_\_\_\_

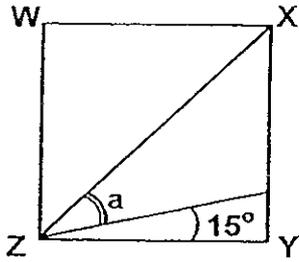
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19) Faris had five times as many postcards as Kristy. If Kristy has  $n$  postcards, express the total number of postcards they have in terms of  $n$ .

Ans: \_\_\_\_\_

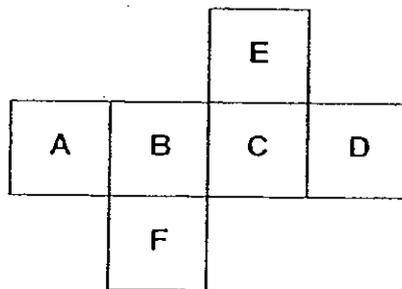
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20) WXYZ is a square. Find  $\angle a$ .



Ans: \_\_\_\_\_

Use the net of a cube below to answer Questions 21 and 22.



21) After folding the net above into a cube, name the face that is opposite of "A".

Ans: \_\_\_\_\_

22) Each face has 4 edges. Faces "A", "C" and "F" each share an edge of face "B" after folding the net above into a cube. Name the other face that share an edge with face "B".

Ans: \_\_\_\_\_

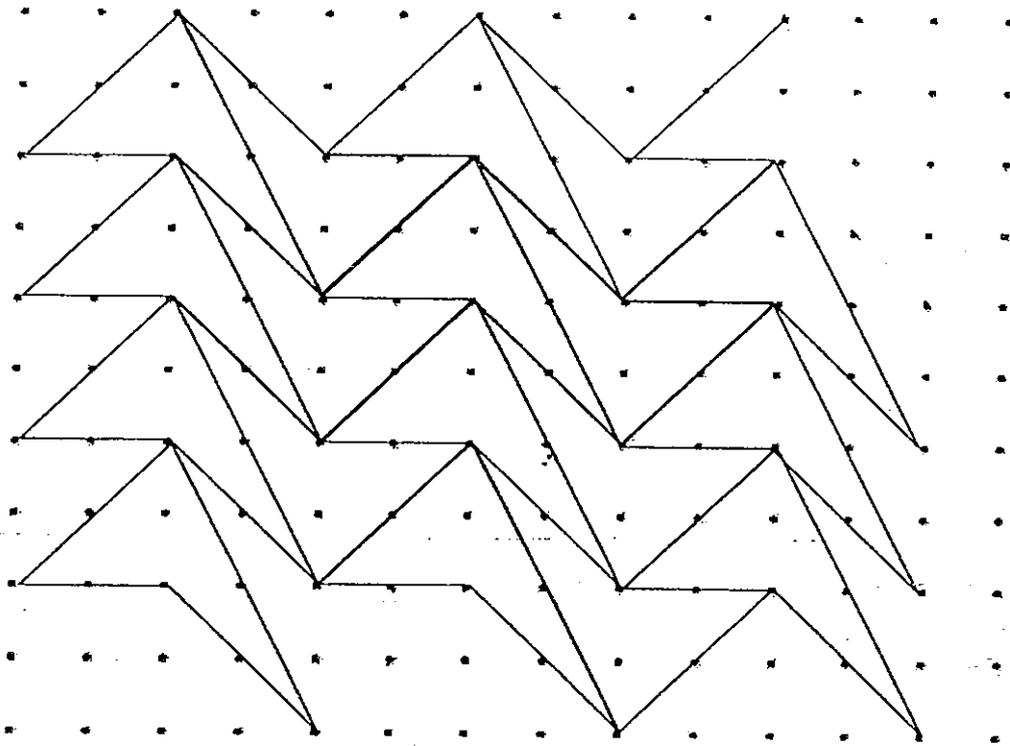
23) Melissa and Dinah shared \$91. For every \$4 that Melissa received, Dinah received \$9. How much did Dinah get?

Ans: \$ \_\_\_\_\_

- 24)  $A : B = 3 : 2$ .  
 $B : C = 5 : 7$ .  
What is  $A : C$ ?

Ans: \_\_\_\_\_

- 25) The pattern in the box shows part of a tessellation. Extend the tessellation by drawing **two** more unit shapes in the space provided within the box.



Questions 26 to 35 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. (20 marks)

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26) Jonathan is  $m$  years old now. His father is 20 years older than him. What would their total age be in 4 years' time? Express your answer in terms of  $m$ .

Ans: \_\_\_\_\_ years old

---

27) The average mass of 7 durians is  $w$  kg. If the total mass of 3 durians is 8 kg, what is the average mass of the remaining durians in terms of  $w$ ?

Ans: \_\_\_\_\_ kg

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28) Shanna cut 8 pieces of ribbon, each measuring 5 cm, from  $b$  metres of ribbon. What length of the ribbon is left? Express your answer in metres.

Ans: \_\_\_\_\_ m

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- 29) Suzy bought 12 stickers from Singapura Bookshop. The price of each sticker was the same. If the price of 1 sticker was cheaper by 5-cents, she could have bought 4 more stickers at the cheaper price. How much did she spend on the 12 stickers?

Ans: \$ \_\_\_\_\_

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- 30)  $\frac{1}{3}$  of a cup is filled with orange juice. The juice is then poured into an empty jug which has a volume 4 times that of a cup. What fraction of the jug is filled with juice?

Ans: \_\_\_\_\_

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- 31) The ratio of the perimeter of Square A to the perimeter of Square B is 1 : 4. If the perimeter of Square B is 64 cm, find the difference between the areas of the two squares.

Ans: \_\_\_\_\_  $\text{cm}^2$

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- 32) Clara bought 1000 ml of mineral water. She drank 320 ml and her mother drank  $\frac{3}{20}$  of the remainder. How much mineral water did her mother drink?

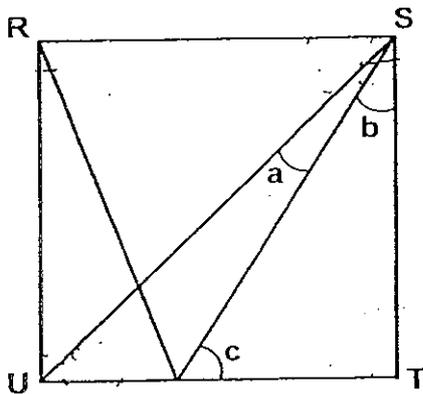
Ans: \_\_\_\_\_ ml

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- 33) The average age of Sarvin and his father is 45 years. Given that Sarvin is  $\frac{1}{4}$  as old as his father, how old is Sarvin now?

Ans: \_\_\_\_\_ years old

- 34) RSTU is a square. The ratio of  $\angle a$  to  $\angle b$  is 1 : 2. Find  $\angle c$ .



Ans: \_\_\_\_\_ °

- 35) Ann has  $\frac{3}{2}$  as many marbles as Benny. Carl has 2 times as many marbles as Benny.

- (a) What is the ratio of the number of marbles Ann has to the number of marbles Benny has?
- (b) What is the ratio of the number of marbles Carl has to the total number of marbles the three children have?

Ans: (a) \_\_\_\_\_ (1 m)

Ans: (b) \_\_\_\_\_ (1 m)

For questions 36 to 48, 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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- 36) Lynette, Vinitha and Carissa have \$865 altogether. Lynette spends  $\frac{2}{5}$  of her money. Vinitha spends \$40 and Carissa spends twice the amount of what Lynette has spent. If they have the same amount of money left, how much money did Carissa have at first?

Ans: \_\_\_\_\_ [3]

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- 37) Some boys shared a packet of onion rings. If each boy eats 10 rings, there will be 3 rings short. If each boy takes 9 rings, there will be 4 rings extra. How many pieces of onion rings are there in the packet?

Ans: \_\_\_\_\_ [3] 67

- 38) Melvin had a bag of sugar. His family used an equal amount of sugar each day. After 3 days, he had  $\frac{4}{5}$  of the sugar left. After another 5 days, he had 7 kg of sugar left. How much sugar was in the bag at first?

Ans: \_\_\_\_\_ [3]

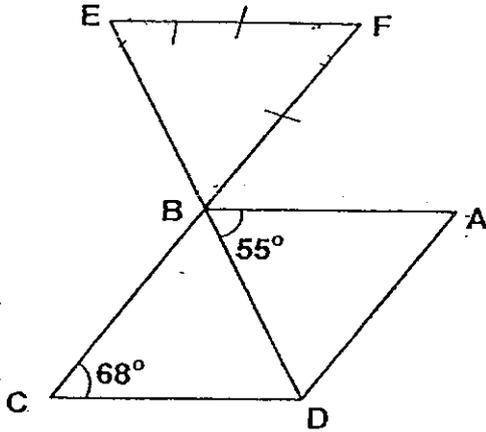
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- 39) A book costs \$  $m$  and a file costs \$6 less than a book.
- (a) What is the cost of 1 book and 1 file?  
Express your answer in terms of  $m$  in its simplest form.
- (b) Joshua paid \$10 for 1 book and 1 file. If the book costs \$7, how much change would Joshua receive from the cashier?

Ans: (a) \_\_\_\_\_ [1]

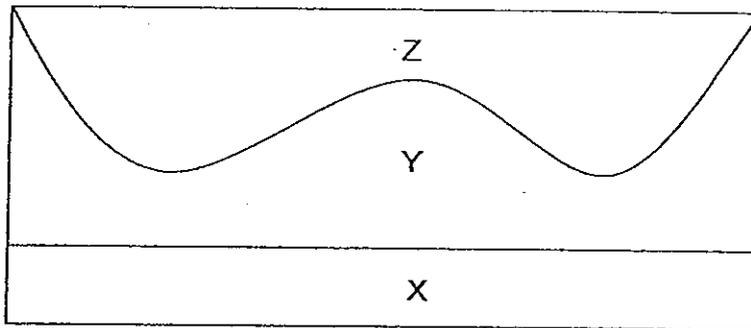
(b) \_\_\_\_\_ [2]

- 40) In the figure below, ABCD is a parallelogram and DBE and FBC are straight lines. Given that  $\angle BCD = 68^\circ$  and  $\angle ABD = 55^\circ$  find  $\angle BFE$ .



Ans: \_\_\_\_\_ [3]

41)



In the figure above, not drawn to scale, the area of X is  $\frac{1}{4}$  of the whole rectangle. The ratio of Area Y to Area Z is 5 : 4. What is the ratio of Area X to Area Y to Area Z?

Ans: \_\_\_\_\_ [3] 69

- 42) An equal number of male and female runners took part in the National Education Marathon last year. 980 male runners and 350 female runners <sup>quit running and</sup> did not complete the marathon. The number of male runners left was  $\frac{1}{6}$  the number of female runners. What was the total number of runners at the start of the marathon?

Ans: \_\_\_\_\_ [4]

- 43) Jill bought some blue and red markers.  $\frac{2}{3}$  of the markers she bought were blue and the rest were red. She gave away  $\frac{3}{4}$  of the blue markers and  $\frac{1}{4}$  of the red markers, she had 100 markers left. How many markers in all did she buy at first?

Ans: \_\_\_\_\_ [4] 77

- 44) Benjamin had 2 bags of sweets. After transferring  $\frac{1}{10}$  of the sweets in Bag B to Bag A, the ratio of the number of sweets in Bag A to that in Bag B becomes 1 : 3. What was the ratio of the number of sweets in ~~Packet~~<sup>Bag</sup> A to that in ~~Packet~~<sup>Bag</sup> B at first?

Ans: \_\_\_\_\_ [4]

- 45) At first, Shop X has 156 kg of rice flour and Shop Y has 72 kg of rice flour. After each shop sold the same quantity of rice flour, the amount of rice flour that Shop X has was 4 times that of Shop Y. How many kilograms of rice flour did Shop X sell?

Ans: \_\_\_\_\_ [5] 73

- 46) Mr Singh had \$315 worth of concert tickets. He sold 4 adult tickets and 3 child tickets. Each adult ticket is  $1\frac{1}{2}$  times as much as a child ticket. If the value of the tickets Mr Singh had left is  $\frac{3}{7}$  of the original amount, what is the cost of a child ticket?

Ans: \_\_\_\_\_ [5]

- 47) Jerrick and Edan each bought a number of trading cards. Jerrick gave away  $\frac{1}{12}$  of his trading cards to Edan and had 165 cards left.
- (a) How many trading cards did Jerrick give Edan?
- (b) If the number of cards given to Edan was  $\frac{1}{3}$  of what Edan had, find the number of cards Edan had at first.
- (c) After receiving the cards from Jerrick, Edan gave  $\frac{2}{5}$  of his cards to Jerrick. Find the ratio of the number of cards Jerrick had after this to the total number of cards bought by the two boys.

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [1]

(c) \_\_\_\_\_ [3]

75

48) There were 500 cubes and marbles in a container. The ratio of the number of cubes to the number of marbles was 7 : 18. After Candia took out 45 cubes from the container and put in some marbles,  $\frac{4}{5}$  of the objects in the container were marbles.

- (a) How many cubes were left in the container?
- (b) How many marbles did Candia put in?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [3]

**~END OF PAPER~**  
*Have you checked your work thoroughly?*

# ANSWER SHEET

EXAM PAPER 2008

SCHOOL : ROSYTH PRIMARY SCHOOL

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA 1

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

16) 3

17) 23

18)  $\frac{9}{20}$

19)  $6n$

20) 30

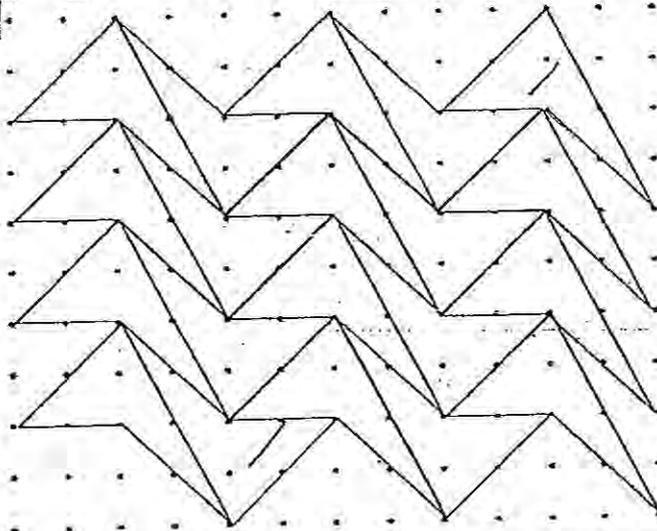
21) C

22) E

23) \$63

24) 15:14

25)



26)  $(2m+28)$  years old

27)  $(1w-8)$  kg

28)  $(b-0.4)$  m

29) \$2.40

30)  $\frac{1}{12}$

31)  $240\text{cm}^2$

32) 102ml

33) 18 years old

34) 60°

35) a) 3:2

b) 4:9

36)  $856-40=825$

$825-15=55$

$55 \times 7 = 385$

She had \$385 at first.

37) There are 67 pieces of onion rings in the packet.

38)  $4 \times 3 = 12$

$12 - 5 = 7$

$7 \div 7 = 1$

$1 \times 15 = 15$

There was 15kg of sugar in the bag at first.

39) a)  $1f \rightarrow m-6$

$= (m-6)$

$1b+1f \rightarrow (m-6)+m$

$= (2m-6)$

The cost of 1 book and 1 file is  $\$(2m-6)$

b)  $b \rightarrow 7$

$f \rightarrow 7-6=1$

$1b+1f \rightarrow 7+1=8$

$10-8=2$

Joshua would receive \$2 of change from the cashier.

$$40) 68^\circ + 55^\circ = 123^\circ$$

$$180^\circ - 123^\circ = 57^\circ$$

$$57^\circ \times 2 = 114^\circ$$

$$180^\circ - 114^\circ = 66^\circ$$

$\angle$  BFE is  $66^\circ$

41) The ratio of area X to area Y to area Z is 3:5:4

X : Y : Z

5 : 4

1 : 3

3 : 9

3 : 5 : 4

$$42) 980 - 350 = 630$$

$$630 \div 50 = 126$$

$$126 + 980 = 1106$$

$$1106 \times 2 = 2212$$

The total runners at the start of the marathon is 2212.

$$43) 2 + 3 = 5$$

$$100 \div 5 = 20$$

$$4 \times 3 = 12$$

$$20 \times 12 = 240$$

She bought 240 markers in all at first.

44) The ratio of the number of sweets in Bag A to that in Bag B at first is 1: 5

$$45) 156 - 72 = 84$$

$$84 \div 3 = 28$$

$$72 - 28 = 44$$

Shop X sold 44kg of rice.

46)  $315 \div 7 = 45$

$45 \times 4 = 180$

$4at \rightarrow 6ct$

$6ct + 3ct = 9ct$

$180 \div 9ct = 20$

The cost of a child ticket is \$20.

47)a)  $12 - 1 = 11$

$165 \div 11 = 15$

Jerrick gave Edan 15 trading cards.

b)  $15 \times 3 = 45$

Edan had 45 cards.

c)  $15 \times 3 = 45$

$45 \div 5 = 9$

$9 \times 2 = 18$

$165 + 18 = 183$

$15 \times 14 = 210$

$183 : 210$

$= 61 : 70$

The ratio is 61:70

48)a)  $500 \div 25 = 20$

$20 \times 7 = 140$

$20 \times 18 = 360$

$140 - 45 = 95$

There were 95 cubes in the container.

b)  $95 \times 4 = 380$

$380 - 360 = 20$

Candia put 20 marbles in.