



NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2009

PRIMARY 6
MATHEMATICS

PAPER 1

DURATION: 50 MINUTES

Booklet A	/ 20
Booklet B	/ 20

Paper 1 Total: / 40

Name: _____ ()

Class: Primary 6 ()

Date: 6 March 2009

Parent's Signature: _____

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

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

YOU ARE NOT ALLOWED TO USE A CALCULATOR.

PAPER 1 (BOOKLET A)

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 Simplify $14p - 8 + 2p + 9$

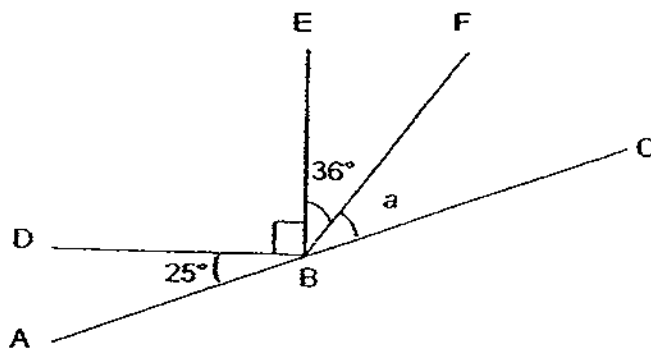
(1) $12p + 1$

(2) $12p - 1$

(3) $16p - 1$

(4) $16p + 1$

2 ABC is a straight line. Find $\angle a$.



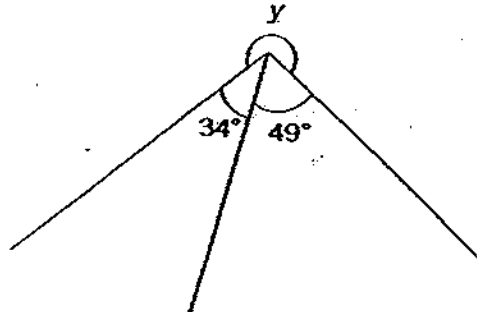
(1) 25°

(2) 29°

(3) 54°

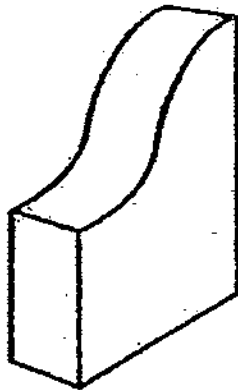
(4) 119°

3 Find $\angle y$ in the figure shown below.



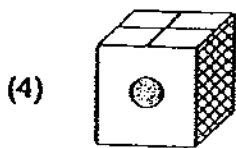
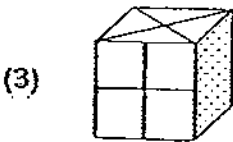
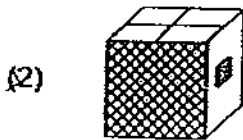
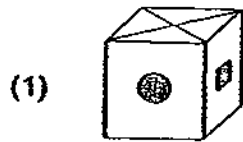
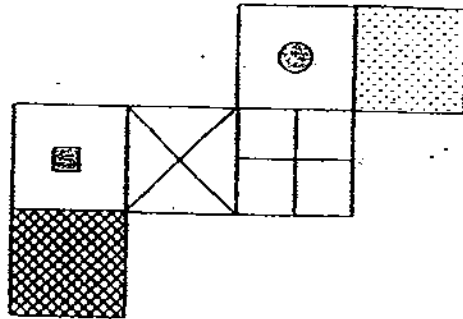
- (1) 83°
- (2) 97°
- (3) 263°
- (4) 277°

4 How many faces is the solid below made up of?



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

5 Which one of the following solids is formed from the net given below?



- 6 What is the missing number in the box?

$$\frac{3}{5} - \frac{1}{2} + \frac{2}{5} = \boxed{} + \frac{1}{6}$$

- (1) $\frac{1}{4}$
- (2) $\frac{1}{3}$
- (3) $\frac{1}{2}$
- (4) $\frac{2}{3}$
- 7 A container contained $\frac{5}{8}$ full of orange juice. $\frac{2}{3}$ of the orange juice was poured into 5 cups. What fraction of the orange juice was there in each cup?

- (1) $\frac{15}{16}$
- (2) $\frac{5}{12}$
- (3) $\frac{2}{15}$
- (4) $\frac{1}{12}$

8 $6 \div \frac{3}{7} = \underline{\hspace{2cm}}$

(1) $\frac{1}{14}$

(2) $\frac{7}{18}$

(3) $2\frac{4}{7}$

(4) 14

9 There are 65 pupils in the Computer Club. There are 25 more boys than girls. What is the ratio of the number of boys to the number of girls?

(1) 4 : 5

(2) 8 : 5

(3) 9 : 4

(4) 9 : 5

- 10 Find the missing number in the box.

$$\boxed{} \times 100 \times 10 \div 1000 = 6 \times 100$$

- (1) 6
(2) 60
(3) 600
(4) 6000
- 11 Both Jason and Sally are given the same amount of pocket money every month. Sally saves $\frac{4}{7}$ of her pocket money in the bank every month. Jason saves $\frac{1}{3}$ of what Sally saves in the bank. What fraction of Jason's pocket money does he save in the bank every month?

- (1) $\frac{1}{7}$
(2) $\frac{4}{21}$
(3) $\frac{8}{21}$
(4) $\frac{19}{21}$

12 A businessman spent $\frac{5}{9}$ of his money on a pair of jeans and $\frac{3}{4}$ of the remainder on 6 shirts. How many shirts could he buy with the money he spent on the jeans?

(1) 2

(2) 6

(3) 10

(4) 18

13 The ratio of the ages of Aslina to Shu Hui is 5 : 4. In 12 years' time, the ratio of the ages of Aslina to Shu Hui will be 8 : 7. How old will Aslina be in 5 years' time?

(1) 20 years old

(2) 25 years old

(3) 60 years old

(4) 65 years old

- 14 There was 96 kg more salt in Container A than in Container B. When 20 kg of salt was transferred from Container B to Container A, there was 3 times as much salt in Container A as in Container B. How much salt was there in Container B at first?
- (1) 58 kg
 - (2) 68 kg
 - (3) 78 kg
 - (4) 88 kg
- 15 Mrs Siva wanted to buy 8 pieces of brownie but found that she was short of \$10.20. If she were to buy 5 pieces of brownie, she would have \$3 left. How much did each brownie cost?
- (1) \$1.65
 - (2) \$2.04
 - (3) \$3.40
 - (4) \$4.40

Name: _____ () Class: Pr. ⁶ 8 ()

P6 CA1 2009

PAPER 1 (BOOKLET B)

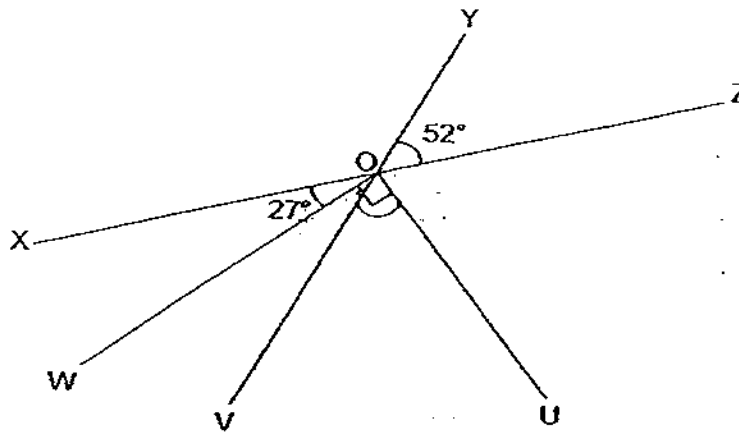
Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16 Find the value of $18 - \frac{3d+6}{7}$ if $d=5$.

Ans: _____

17 XOZ and VOY are straight lines. WO is perpendicular to OU. Find $\angle UOV$.



Ans: _____ °

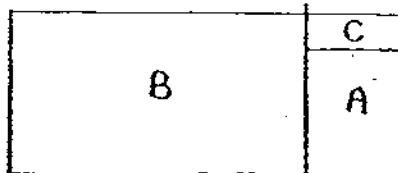
- 18 $\frac{2}{\square}$ is a fraction that lies between $\frac{1}{7}$ and $\frac{1}{8}$. What is the missing whole number in the box?

Ans: _____

- 19 Ted ate $\frac{1}{9}$ of a pizza and distributed the rest of the pizza equally among his 3 friends. What fraction of the pizza did each of his friends receive?

Ans: _____

- 20 The figure below is not drawn to scale. A is thrice the size of C and B is 4 times the size of A. What fraction of the whole figure is the sum of A and C?



Ans: _____

- 21 Mr Menon spent $\frac{1}{2}$ of his salary. He gave $\frac{2}{3}$ of the remainder to his wife and saved the rest. What is the ratio of the amount he spent to the amount he saved?

Ans: _____

- 22 If $\frac{1}{7}$ of A = $\frac{3}{4}$ of B, what is the ratio of A to B?

Ans: _____

- 23 At a fun fair, a bonus of 10 tokens was given for every 30 tokens won. Jermaine collected a total of 220 tokens. How many tokens did she actually win?

Ans: _____

- 24 The number of children in a city is $100\boxed{0}000$ when rounded off to the nearest thousand. What is the largest possible actual number of children in the city?

Ans: _____

- 25 What is the missing number in the box?

$$14 \times 2.7 = 20 \times 2.7 - \boxed{} \times 5.4$$

Ans: _____

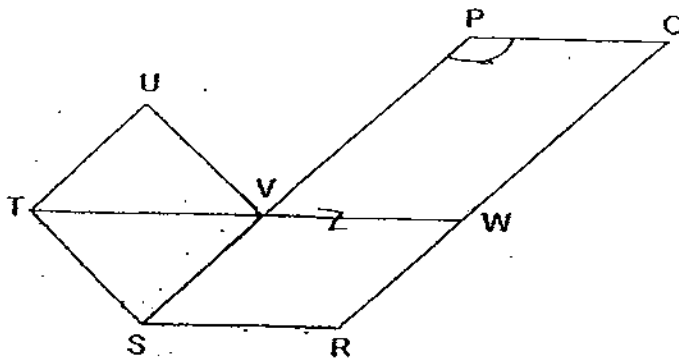
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 6 skirts cost \$ k and a shirt costs \$5. How much do 8 skirts and 7 shirts cost altogether?

Ans: \$ _____

- 27 PQRS is a parallelogram and STUV is a square. TVW is a straight line and TW is parallel to SR. Find $\angle SPQ$.



Ans: _____ °

- 28 Some pupils took a class test. $\frac{9}{10}$ of the pupils who took the test passed. Of these, 63 were boys and the remaining $\frac{2}{3}$ were girls. Find the number of pupils who had taken the test.

Ans: _____

- 29 Joe, Alex and Sean shared some stamps in the ratio 3 : 6 : 5. Sean kept $\frac{1}{5}$ of his stamps for himself and gave the rest of his stamps to Joe and Alex in the ratio 1 : 3. As a result, Joe has 105 stamps more than Sean. How many stamps did Sean give to Joe?

Ans: _____

- 30 Jack, Claire and Dan shared 500 stickers among themselves. Claire received 5 stickers more than Jack. Dan received thrice as many stickers as Claire. How many stickers did Dan receive?

Ans: _____



NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2009

PRIMARY 6
MATHEMATICS

PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 6 ()

Date: 6 March 2009

Parent's Signature: _____

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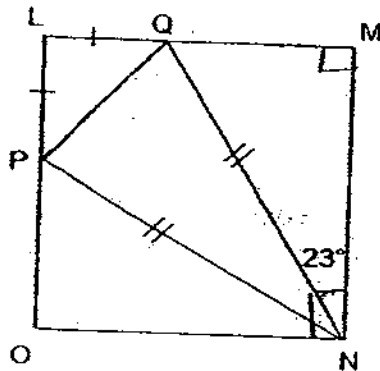
ANSWER ALL QUESTIONS.

YOU ARE ALLOWED TO USE A CALCULATOR.

PAPER 2

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

- 1 LMNO is a square. PQN and PLQ are isosceles triangles. $\angle QNM$ is 23° . Find $\angle NPQ$.



Ans: _____

- 2 Find the value of $1\frac{2}{3} - \frac{4}{5} + \frac{5}{6}$.

Ans: _____

- 3 The ratio of the number of Chloe's stickers to the number of Faith's stickers is 3 : 5. The ratio of the number of Faith's stickers to Melissa's stickers is 6 : 7. If Melissa has 204 stickers more than Chloe, how many stickers do they have altogether?

Ans: _____

- 4 Box A contains only one-dollar coins, Box B contains only fifty-cent coins and Box C contains only twenty-cent coins. Box A has 5 times as many coins as Box C. Box B contains 12 coins fewer than Box A. Box C contains half the number of coins in Box B. How much money is there in Box B?

Ans: \$ _____

- 5 A container with Bottle A placed in it has a mass of 4.27 kg. An identical container with Bottle B placed in it has a mass of 6.58 kg. The mass of Bottle A is $\frac{1}{3}$ that of Bottle B. What is the mass of the Bottle A? Give your answer correct to 2 decimal places.

Ans: _____ kg

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)

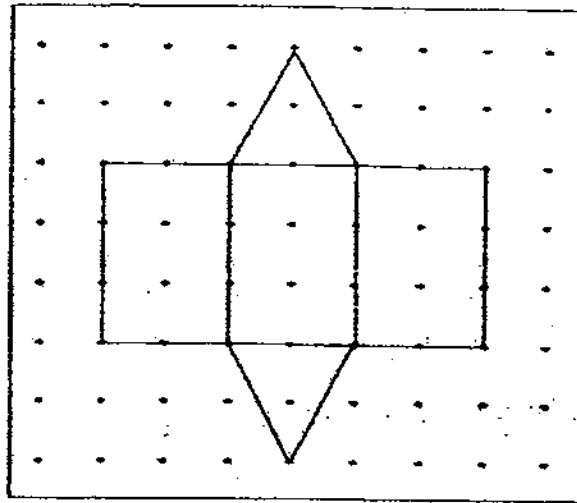
6 (a) Arif is $2x$ years old. His father is 4 times as old as he. His mother is 3 years younger than his father. What is their total age in terms of x ?

(b) If $x = 4$, find their total age.

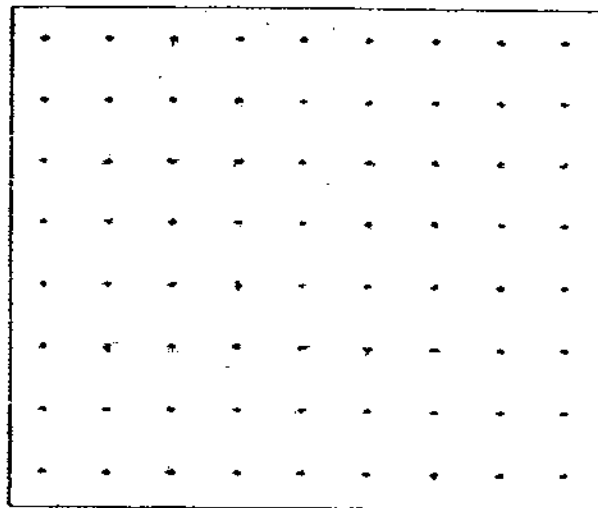
Ans: (a) _____ [2]

(b) _____ [1]

7 (a) Name the solid figure of the given net shown below.



(b) Draw an alternative net for the solid figure shown in part (a) in the box below.



Ans: (a) _____ [1]

(b) _____ [2]

- 8 Wilson and Yi Lin had \$71 altogether. Yi Lin and Patrick had \$105 altogether. Wilson had $\frac{3}{5}$ of the money that Patrick had. How much money did Yi Lin ~~had~~ have?

Ans: _____ [3]

- 9 Nigel had a total of 227 durians and pears. He sold half of the durians and bought another 40 pears. As a result, he had an equal number of durians and pears.

(a) How many durians were there at first?

(b) How many pears were there at first?

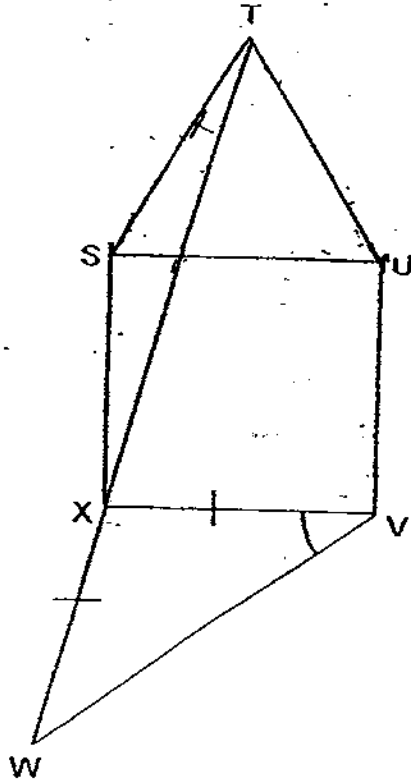
Ans: (a) _____ [2]

(b) _____ [1]

10 In the figure shown below, $SUVX$ is a square. STU is an equilateral triangle and TXW is a straight line.

(a) Find the value of $\angle STX$.

(b) Find the value of $\angle WWX$.



Ans: (a) _____ [1]

(b) _____ [2]

- 11 There were some marbles in a box. Sofie took out $\frac{2}{5}$ of the marbles and put in 6 more. Then John took out $\frac{1}{6}$ of the remaining marbles and put in 5 more. There were 25 marbles left. How many marbles were in the box at first?

Ans: _____ [4]

- 12 Rahim's age is $\frac{2}{9}$ of his grandfather's. His grandfather will be 100 years old in 19 years' time. In how many years' time will Rahim's age be $\frac{1}{4}$ that of his grandfather's?

Ans: _____ [4]

- 13 The ratio of Jane's allowance to Olivia's allowance was $4 : 3$. After Jane and Olivia were given \$15 and \$8 respectively, the ratio of Jane's allowance to Olivia's allowance became $3 : 2$. How much allowance did Jane have at first?

Ans: _____ [4]

- 14 Mr Lim paid \$134.40 for some jackfruits and pomeloes. The cost of the pomelo was 0.8 that of a jackfruit. A pomelo cost \$5.60. If all the pomeloes cost \$22.40 more than the jackfruits, how many fruits did he buy?

Ans: _____ [4]

- 15 Three men, A, B and C, worked together to paint a wall. If the painting was done by one man, the time taken to complete the wall for A, B and C would have been 6 hours, 8 hours and 12 hours respectively. A and B had painted for 3 hours after which A rested. B and C then continued with the painting. What would be the total number of hours taken to complete the wall? (Give your answer as a mixed number.)

Ans: _____ [4]

- 16 The ratio of the number of boys to the number of girls in School A is 4 : 1. The ratio of the number of boys to the number of girls in School B is 2 : 3. School A had twice as many pupils as School B.
- (a) What is the ratio of the number of boys in School A to the number of girls in School B?
- (b) After 30 girls left School A to join School B, the ratio of the number of boys to the number of girls in School B is now 5 : 8. How many girls are there in School B now?

Ans: (a) _____ [2]

(b) _____ [3]

17 John had some red and blue marbles in a box. The sum of $\frac{1}{4}$ of the red marbles and $\frac{2}{5}$ of the blue marbles in the box is 64. The sum of $\frac{3}{4}$ of the red marbles and $\frac{4}{5}$ of the blue marbles in the box is 144.

- (a) How many red marbles are there in the box?
- (b) How many blue marbles are there in the box?

Ans: (a) _____ [3]

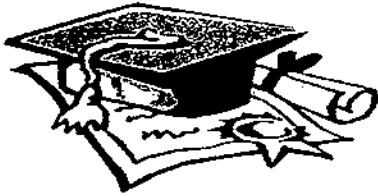
(b) _____ [2]

- 18** Ace Drama Company sold some tickets for a children's performance. It sold the same number of \$8 and \$5 tickets in week 1 and collected a total of \$1664. In week 2, it sold 96 ~~more~~ \$8 and \$5 tickets. If the company collected \$632 more from the sale of \$8 tickets than the \$5 tickets in the two weeks, how many \$8 tickets were sold altogether?

Ans: _____ [5]

END OF PAPER

Setters: Mdm A. Toh
Mdm Yee Y.M.

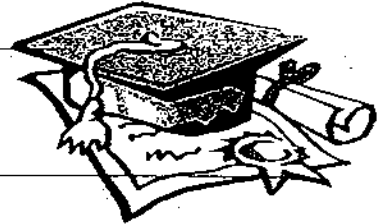


ANSWER SHEET

EXAM PAPER 2009

SCHOOL : NANYANG PRIMARY SCHOOL
SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA 1

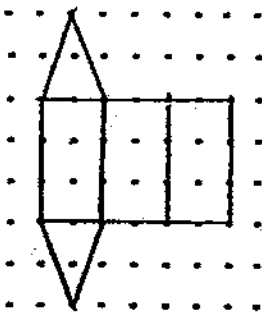


Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
4	2	4	1	1	2	4	4	3	3	2	3	2	4	4

- 16)15 17)65° 18)15 19)8/27 20) 1/4
- 21)3:1 22)21:4 23)170 24)100499 25)3
- 26)8k/6 27)135° 28)210 29)35 30)303

Paper 2

1) $180^\circ - 90^\circ = 90^\circ$ $90^\circ \div 2 = 45^\circ$ $180^\circ - 90^\circ = 90^\circ$ $90^\circ - 23^\circ = 67^\circ$ $180^\circ - 67^\circ - 45^\circ = 68^\circ$	2) $12/3 - 4/5 = 13/15$ $13/15 + 5/6 = 17/10$ $= 17/10$
3) $35 - 18 = 17$ $204 \div 17 = 12$ $12 \times (18 + 30 + 35)$ $= 12 \times 83 = 996$	4) $12 \div 3 = 4$ $4 \times 2 = 8$ $8 \times 0.50 = 4$
5) $6.58 - 4.27 = 2.31$ $3 - 1 = 2$ $2.31 \div 2 = 1.155$ $1.155 \approx 1.16$	6) $2X \times 4 = 8X$ (father) $8X - 3$ (mother) $2X + 8X + 8X = 3$ $= 18X - 3$ (total) $18 \times 4 = 72$ $72 - 3 = 69$

<p>7)a) prism b) </p>	<p>8) $\\$105 - \\$71 = \\$34$ $5 - 2 = 3$ $\\$34 \div 2 = \\17 $\\$17 \times 5 = \\85 $\\$105 - \\$85 = \\$20$</p>
<p>9)a) $227 + 40 = 267$ $267 \div 3 = 89$ $89 \times 2 = 178$ b) $89 - 40 = 49$</p>	<p>10)a) $180^\circ - 150^\circ = 30^\circ$ $30^\circ \div 2 = 15^\circ$ b) $90^\circ - 15^\circ = 75^\circ$ $75^\circ \div 2 = 37.5^\circ$</p>
<p>11) $25 - 5 = 20$ $6 - 1 = 5$ $20 \div 5 = 4$ $4 \times 6 = 24$ $24 - 6 = 18$ $18 + 12 = 30$</p>	<p>12) $100 - 19 = 81$ $81 \times 2/9 = 18$ $84 \div 21 = 4$ $84 - 81 = 3$</p>
<p>13) $\\$24$</p>	<p>14) $\\$5.60 \div 0.8 = \\7 $(\\$134.40 \times \\$22.40) \div 2$ $= \\$78.40$ $\\$78.40 \div \\$5.60 = 14$ $\\$134.40 - \\$78.40 = \\$56$ $\\$56 \div 7 = 8$ $14 + 8 = 22$</p>
<p>15) $3 \frac{3}{5} \text{ sh}$</p>	<p>16)a) 8:3 b) 480</p>
<p>17)a) 64 b) 120</p>	<p>18) 184</p>