

**FIRST SEMESTRAL EXAMINATION
2016**

**PRIMARY 5
MATHEMATICS**

PAPER 1

DURATION: 50 MINUTES

18 May 2016.

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)

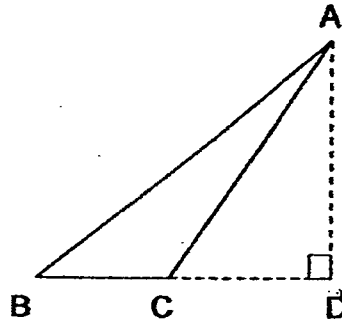
- 1 Which one of the following is eight million, two hundred and seven thousand and fourteen in figures? ~

- (1) 8 200 714
- (2) 8 207 014
- (3) 8 207 040
- (4) 8 270 714

- 2 What is the value of $2 \times (300 - 288) \div 4$?

- (1) 598
- (2) 456
- (3) 78
- (4) 6

- 5 Given that the height of triangle ABC is AD, find its corresponding base.



- (1) AB
 - (2) AC
 - (3) BC
 - (4) BD
- 6 Which one of the following is the equivalent ratio of 8 : 3?

- (1) 16 : 12
- (2) 24 : 24
- (3) 40 : 15
- (4) 64 : 9

3 What is the value of $\frac{4}{5} \div 8$?

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

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

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

(4) $\frac{32}{5}$

4 Observe the pattern below.

$$29.4 \div 2 = 14.7$$

$$29.4 \div \boxed{} = 0.147$$

What is the missing number in the box?

(1) 20

(2) 200

(3) 2000

(4) 20 000

7 Find the product of 5 and $\frac{7}{11}$

(1) $\frac{7}{55}$

(2) $\frac{35}{55}$

(3) $3\frac{2}{11}$

(4) $7\frac{6}{7}$

8 Find the sum of 20 tenths and 5 hundredths.

(1) 0.205

(2) 2.05

(3) 20.5

(4) 205.0

9 Express $\frac{1}{4}$ as a decimal.

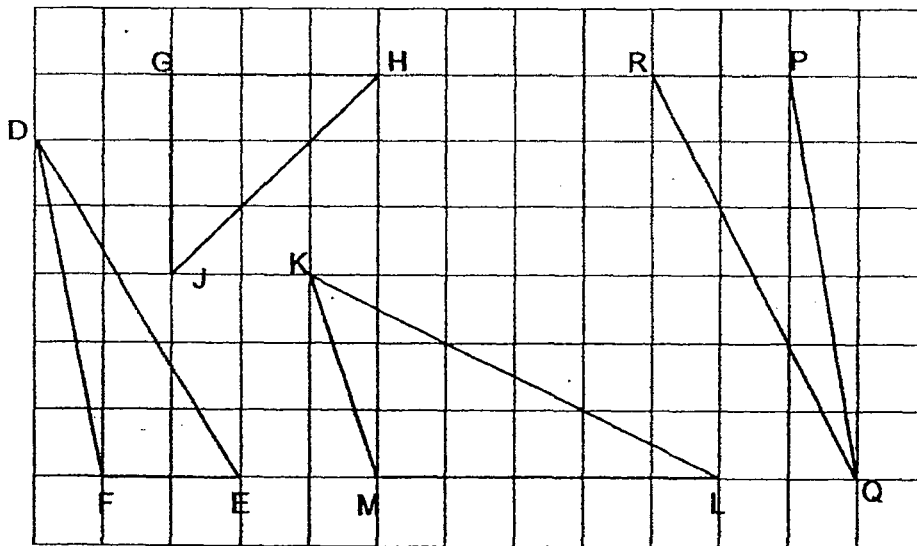
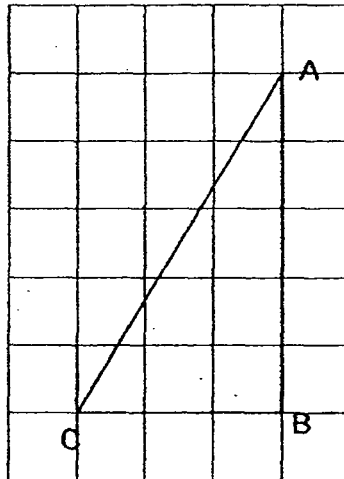
(1) 0.2

(2) 0.25

(3) 0.4

(4) 0.416

- 10 Triangles ABC, DEF, GHJ, KLM and PQR are drawn on the square grid below. Which triangle has the same area as triangle ABC?



- (1) Triangle DEF
- (2) Triangle GHJ
- (3) Triangle KLM
- (4) Triangle PQR

- 11 Andy spent 3000 seconds to complete all the 32 questions. He spent a total of 840 seconds on the first 12 questions. He then spent an equal amount of time on each of the remaining questions. How much time did he spend on each of the remaining questions?

- (1) 72 seconds
- (2) 108 seconds
- (3) 113 seconds
- (4) 118 seconds

- 12 $\frac{1}{3}$ of a rod is painted green. $\frac{1}{4}$ of the remaining rod is then painted yellow. What fraction of the rod is painted yellow?

- (1) $\frac{1}{12}$
- (2) $\frac{1}{6}$
- (3) $\frac{1}{4}$
- (4) $\frac{3}{4}$

- 13 Five children share $\frac{3}{4}$ of a pizza equally. What fraction of the pizza does each child get?

(1) $\frac{3}{20}$

(2) $\frac{4}{15}$

(3) $\frac{15}{4}$

(4) $\frac{20}{3}$

- 14 The length of a rope is 9.2 m. A string is 2.25 m shorter than the rope. Find the length of the string.

(1) 6.95 m

(2) 7.05 m

(3) 7.95 m

(4) 11.45 m

Name: _____ () Class: Pr 5 ()

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 Round off 7 009 529 to the nearest thousand.

Ans: _____

17 Find the value of 703×89 .

Ans: _____

18 What is the missing number in the box below?

$$745\,000 \div 500 = 10 \times \square$$

Ans: _____

19 Find the value of $4350 \div (58 - 28)$.

Ans: _____

- 20 Find the product of $\frac{5}{8}$ and $\frac{4}{9}$.

Give your answer as a fraction in its simplest form.

- 21 Find the value of $\frac{6}{7} \div 9$.

Give your answer as a fraction in its simplest form.

Ans: _____

- 22 Find the value of 5.02×9 .

Give your answer as a decimal.

Ans: _____

23 Express 3.08 kg in grams.

Ans: _____ g

24 Round off 6.855 to 2 decimal places.

Ans: _____

25 Daniel bought $\frac{7}{8}$ kg of sugar. He used $\frac{2}{3}$ kg to bake cakes. How much sugar had he left?

Ans: _____ kg

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 Find the value of $175 + 25 \times 2$.

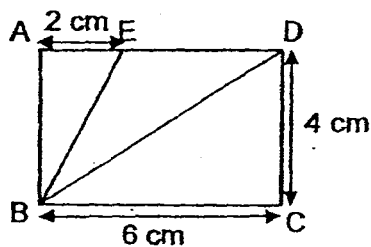
Ans: _____

- 27 What is the missing number in the box below?

$$26.07 \div \boxed{} = 5.214 \div 2$$

Ans: _____

- 28 In the figure below, ABCD is a rectangle and $BC = 6$ cm, $CD = 4$ cm and $AE = 2$ cm. Find the area of triangle BDE.

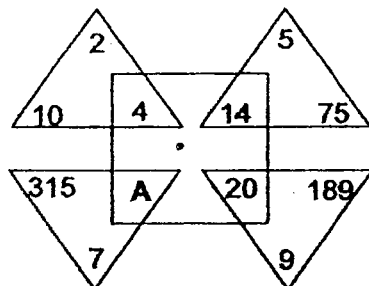


Ans: _____ cm^2

- 29 The total mass of 30 identical cans of baked beans is 12.45 kg. Find the mass of 2 such cans of baked beans.

Ans: _____ kg

- 30 Study the number arrangement carefully. What is the value of A?



Ans: _____

END OF PAPER

**FIRST SEMESTRAL EXAMINATION
2016**

**PRIMARY 5
MATHEMATICS
PAPER 2**

DURATION: 1 HOUR 40 MINUTES

18 May 2016.

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 Find the difference between 6048 and 365 by first rounding off each number to the nearest hundred.

Ans: _____

- 2 Peter ran a distance of 2 km in 10 minutes. At this rate, what was the total distance he ran in 1 hour?

Ans: _____ km

- 3 John completed a race in 125 seconds. He took 35 seconds less than Daniel to complete the race. How many minutes did Daniel take to complete the race? Give your answer correct to 2 decimal places.

Ans: _____ min

- 4 Jeremy bought some paint to paint his house. He used $18\frac{3}{5}$ l of paint for the living room, $8\frac{1}{2}$ l of paint for the study room and $10\frac{3}{4}$ l of paint for the master bedroom. How many litres of paint did he use altogether? Give your answer as a mixed number in its simplest form.

Ans: _____

- 5 Mr Lim had $6\frac{1}{2}$ m of wire. Ali had 3 times as much wire as Mr Lim. How much wire did they have altogether?

Ans: _____ m

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 The table below shows a plant's height on the first day of each month from January to May.

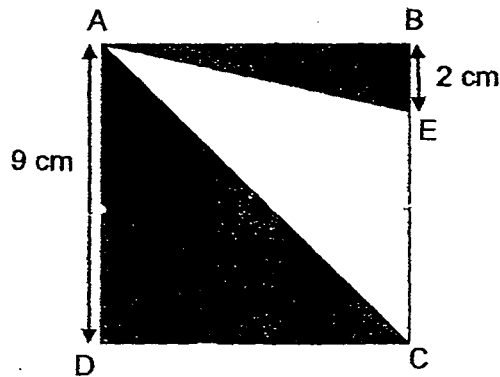
Date	Height (cm)
1 st January	8.3
1 st February	9.5
1 st March	10.0
1 st April	10.7
1 st May	11.4

- (a) What was the height of the plant on 1st February? Give your answer to the nearest cm.
- (b) What was the increase in the plant's height from 1st April to 1st May?

Ans: (a) _____ [1]

(b) _____ [2]

- 7 The figure below shows square ABCD. $BE = 2\text{ cm}$ and $AD = 9\text{ cm}$.



- (a) Given that the base of triangle ACE is EC, what is the height of triangle ACE in cm?
- (b) What is the total area of the shaded parts in the figure?

Ans: (a) _____ [1]

(b) _____ [2]

- 8 A bookstore sells either one pen for \$2 or in packs of 5 for \$7. Wendy wants to buy exactly 33 pens with the smallest amount of money. How much does she have to pay for the 33 pens?

Ans: _____ [3]

- 9 The length of a rectangular table top is $\frac{21}{5}$ m. Its breadth is $\frac{5}{7}$ of its length. $\frac{1}{4}$ of the table top is painted. What is the area of the table top that is painted? Give your answer as a mixed number in its simplest form.

Ans: _____ [3]

- 10 There were 30 questions in a quiz. Andy answered all the questions and scored 101 marks. For each correct answer, 5 marks were given. For each wrong answer, 2 marks were deducted. How many questions did Andy answer correctly?

Ans: _____

- 11 The total cost of a basket and 15 identical boxes of chocolates is \$61.
The total cost of the same basket and 7 such boxes of chocolates is \$37.

- (a) How much does each box of chocolate cost?
(b) How much does the basket cost?

Ans: (a) _____ [2]

(b) _____ [2]

- 12 There are 210 spectators at the stadium. $\frac{2}{7}$ of the spectators are male. $\frac{2}{3}$ of the male spectators are men and $\frac{1}{5}$ of the female spectators are girls. How many men and women are there at the stadium altogether?

Ans: _____ [4]

- 13 Sarah spent \$72 on 24 identical notebooks and 6 identical pens. One pen cost \$0.50 less than a notebook.

(a) What was the cost of one notebook?

(b) What was the greatest number of such pens that Mary could buy if she had \$57?

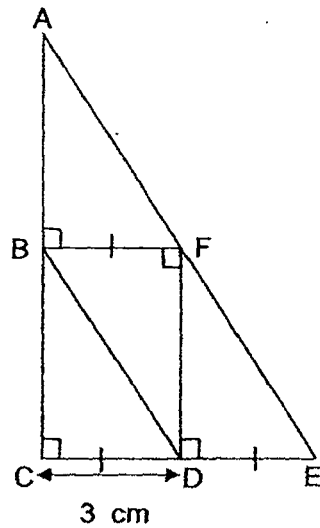
Ans: (a) _____ [3]

(b) _____ [1]

- 14 Valerie spent \$2743 on a laptop, a camera and a mobile phone. The laptop cost 4 times as much as the camera. The camera cost \$95 more than the mobile phone. Find the total amount of money that Valerie spent on the mobile phone and the camera.

Ans: _____ [4]

- 15 Triangle ACE below is made up of 4 identical right-angled triangles, ABF, BCD, FBD and FDE. $BF = CD = DE = 3$ cm. The perimeter of triangle ACE is 24 cm. AC is 2 cm shorter than AE. What is the area of triangle ACE?



Ans: _____ [4]

- 16 Amelia, Betsy, Charlie and Danny received a total of \$360. Charlie received $\frac{1}{4}$ of the total amount of money. Amelia received $\frac{1}{8}$ of the total amount of money received by Betsy and Danny. Betsy received $\frac{3}{5}$ as much money as Danny. How much did Betsy receive?

Ans: _____ [5]

- 17 Andy, Benjamin and Caleb had a total of 698 coins at first. After a week, the number of Andy's coins became 3 times the number of coins he had at first. The number of Benjamin's coins decreased by 138. Caleb had half as many coins as he had at first. In the end, the three boys had the same number of coins.

- (a) How many coins did Caleb have at first?
- (b) What was the total number of coins that the three boys had in the end?

Ans: (a) _____ [3]

(b) _____ [2]

- 18 A marker cost \$1.50. A stapler cost \$15.50 more than the marker. Barry spent \$340 on such markers and staplers. He bought twice as many markers as staplers.

- (a) How many staplers did Barry buy?
- (b) How much money did Barry spend on the markers?

Ans: (a) _____ [3]

(b) _____ [2]

END OF PAPER

EXAM PAPER 2016
 LEVEL : PRIMARY 5
 SCHOOL : NANYANG PRIMARY SCHOOL
 SUBJECT : MATHEMATICS
 TERM : SA1(PAPER1)

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

16. 7010000

17. 62567

18. $745000 \div 500$
 $= 745000 \div 5 \div 100$
 $= 149000 \div 100$
 $= 1490$

ans: 149

19. $4350 \div 30 = 145$
 ans: 145

20. $\frac{5}{8} \times \frac{4}{9} = \frac{20}{72}$
 $= \frac{10}{36}$
 $= \frac{5}{18}$

21. $\frac{6}{7} \div 9 = \frac{6}{7} \times \frac{1}{9} = \frac{6}{63} = \frac{2}{21}$

ans: $\frac{2}{21}$

22. 45.18

23. 3080g

24. 6.86

25. $\frac{7}{8} \text{ kg} - \frac{2}{3} \text{ kg} = \frac{21}{24} - \frac{16}{24} = \frac{5}{24}$

26. $175 + 50 = 225$
ans: 225

27. 10

28. $6 - 2 = 4$
 $4 \times 4 \times \frac{1}{2} = 8$

ans: 8 cm^2

29. $12.45 \div 30 = 0.415$
 $0.415 \times 2 = 0.830$
ans: 0.830kg

30. $10 \div 2 = 5$
 $5 - 1 = 4$
 $75 \div 5 = 15$
 $15 - 1 = 14$
 $189 \div 9 = 21$
 $21 - 1 = 20$
 $315 \div 7 = 45$
 $45 - 1 = 44$
ans: 44

EXAM PAPER 2016

LEVEL : PRIMARY 5

SCHOOL : NANYANG PRIMARY SCHOOL

SUBJECT : MATHEMATICS

TERM : SA1(PAPER 2)

$$1. 6048 - 365 \approx 6000 - 400 = 5600$$

ans: 5600

$$2. \begin{aligned} 2\text{km} &\rightarrow 10\text{min} \\ 12\text{km} &\rightarrow 60\text{min} \end{aligned}$$

ans: 12km

$$3. 125 + 35 = 160$$

$$\begin{aligned} 160 \text{ seconds} &\approx 2.67 & 160 \div 60 &= 2.666 \\ & & &\approx 2.67 \text{ cans} \end{aligned}$$

ans: 2.67 min

$$4. 10\frac{3}{4} + 8\frac{1}{2} + 18\frac{3}{5} = 37\frac{17}{20}$$

ans: $37\frac{17}{20}$

$$5. 6\frac{1}{2} \times 4 = 26$$

ans: 26m

$$6. a) 9.5 \approx 10$$

$$b) 11.4 - 10.7 = 0.7$$

a) ans: 10cm

b) ans: 0.7cm

$$7. 9 \times 9 = 81$$

$$9 - 2 = 7$$

$$7 \times 9 \times \frac{1}{2} = 31.5$$

$$81 - 31.5 = 49.5 \text{ cm}^2$$

- a) ans: 9cm
b) ans: 49.5cm^2

8. $\$7 \times 6 = \42
 $5 \times 6 = 30$
 $33 - 30 = 3$
 $\$42 + \$2 + \$2 + \$2 = \$48$

ans: \$48

9.

$$\frac{21}{5} \times \frac{5}{7} = 3$$

$$\frac{21}{5} \times 3 = 12\frac{3}{5}$$

$$12\frac{3}{5} \div 4 = 3\frac{3}{20}\text{m}$$

ans: $3\frac{3}{20}\text{m}^2$

10.

Assume all are correct

$$5 \times 30 = 150$$

$$150 - 101 = 49$$

$$5 + 2 = 7$$

$$49 \div 7 = 7$$

$$30 - 7 = 23$$

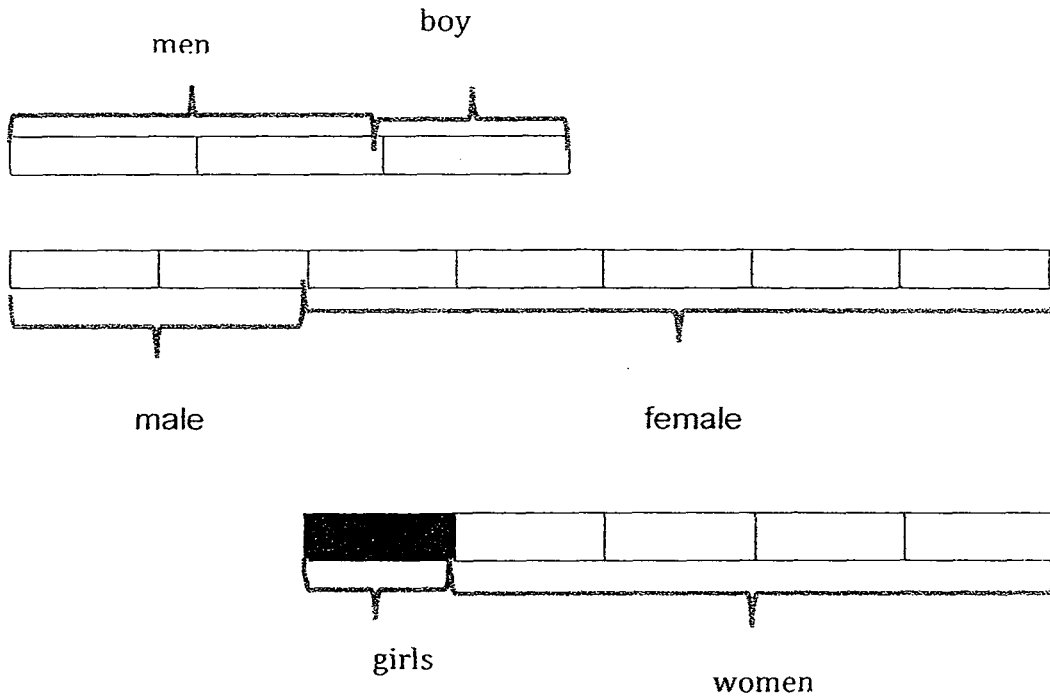
Check: $7 \times 2 = 14$
 $23 \times 5 = 115$
 $115 - 14 = 101$

ans: 23

11. $1B + 15C \rightarrow \$61$
 $1B + 7C \rightarrow \$37$
 $8C \rightarrow \$61 - \$37 = \$24$
 $1C \rightarrow \$24 \div 8 = \3
 $7C \rightarrow \$24 - \$3 = \$21$
 $\$37 - \$21 = \$16$

- a) ans: \$3
b) ans: \$16

12.

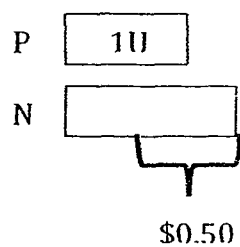


$$\begin{aligned}
 7u &\rightarrow 260 \\
 1u &\rightarrow 210 \div 7 = 30 \\
 2u &\rightarrow 30 \times 2 = 60 \\
 3p &\rightarrow 60 \\
 1p &\rightarrow 60 \div 3 = 20
 \end{aligned}$$

$$\begin{aligned}
 \text{men} &\rightarrow 20 \times 2 = 40 \\
 \text{women} &\rightarrow 4u \rightarrow 30 \times 4 = 120 \\
 120 + 40 &= 160
 \end{aligned}$$

ans:160

13.



$$\begin{aligned}
 \$0.50 \times 24 &= \$12 \\
 \$72 - \$12 &= \$60 \\
 24 + 6 &= 30 \\
 30u &\rightarrow \$60 \\
 1u &\rightarrow \$60 \div 30 = \$2 \\
 \$2 + 0.50 &= \$2.50 \\
 \$57 \div \$2 &= 2R1
 \end{aligned}$$

a) \$2.50
b) 28

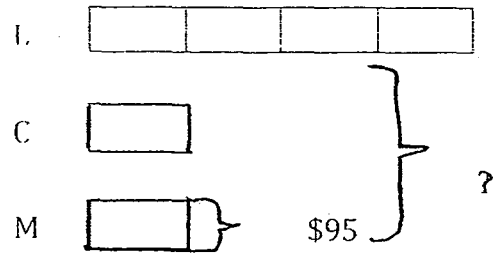
14. $6u \rightarrow \$2743 + \$95 = \$2838$

$1u \rightarrow \$2838 \div 6 = \473

$\$473 \times 2 = \946

$\$946 - \$95 = \$85$

ans: \$851



15.

$3+3=6$

$24-6=18$

$18-2=16$

$16 \div 4 = 4$

$4 \times 2 = 8$

$8 \times 6 \times \frac{1}{2} = 24 \text{ cm}^2$

ans: 24 cm^2

16. $B \rightarrow 3u$

$D \rightarrow 5u$

$A \rightarrow 1u$

$C \rightarrow 3u$

$12u \rightarrow \$360$

$1u \rightarrow \$360 \div 12 = \30

$3u \rightarrow \$30 \times 3 = \90

ans: \$90

17. $10U \rightarrow 698 - 138 = 560$

$1U \rightarrow 560 \div 10 = 56$

$6U \rightarrow 56 \times 6 = 336$

$9U \rightarrow 56 \times 9 = 504$

a) 336

b) 504

18. $\$1.50 + \$15.50 = \$17$

$\$1.50 + \$1.50 + \$17 = \20

$\$340 \div \$20 = 17$ (sets of 2mls)

$17 \times \$2 = 34$

$34 \times \$1.50 = \51

a) ans: 17 b) ans: \$51