THE HEFFERNAN GROUP
P.O. Box 1180
Surrey Hills North VIC 3127
ABN 20 607 374 020
Phone 9836 5021
Fax 9836 5025

Student Name……

FURTHER MATHEMATICS

TRIAL EXAMINATION 1

(FACTS, SKILLS AND APPLICATIONS)

2005

Reading Time: 15 minutes
Writing time: 90 minutes

Instructions to students

This exam consists of Section A and Section B.
Section A contains 13 multiple-choice questions from the core, "Data Analysis".
Section A is compulsory and is worth 13 marks.
Section B consists of 5 modules each containing 9 multiple-choice questions. You should choose 3 of these modules and answer every question in each of your chosen modules.
Each of the modules is worth 9 marks.
Section B begins on page 9 of this exam.
There is a total of 40 marks available for this exam.
Students may bring up to two A4 pages of pre-written notes into the exam.
An answer sheet appears on page 34 of this exam.
Formula sheets can be found on pages 32 and 33 of this exam.

This paper has been prepared independently of the Victorian Curriculum and Assessment Authority to provide additional exam preparation for students. Although references have been reproduced with permission of the Victorian Curriculum and Assessment Authority, the publication is in no way connected with or endorsed by the Victorian Curriculum and Assessment Authority.

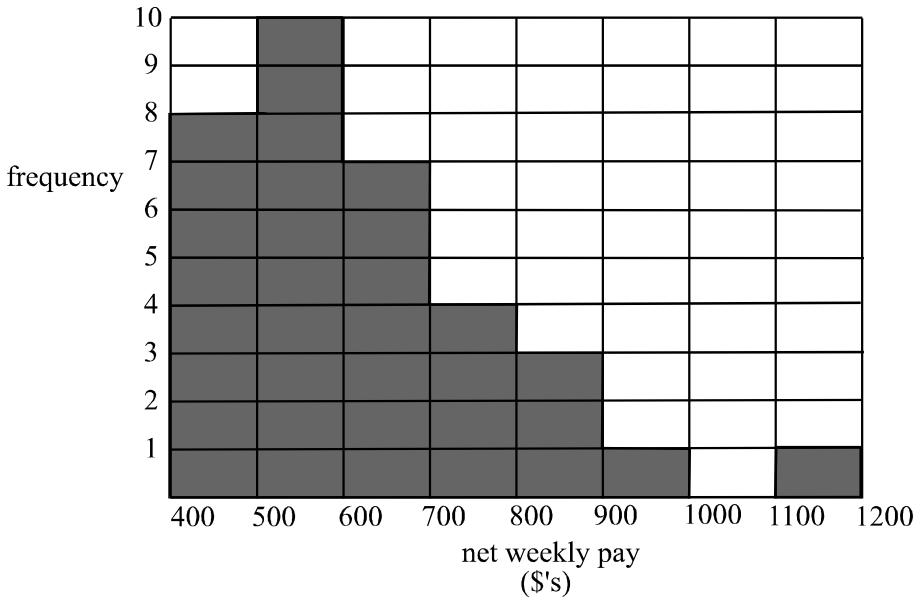
Section A

Core

All questions must be answered.

The following information relates to questions 1, 2 and 3.

The net weekly pay of 34 people who work in the same office is shown in the histogram below.



Question 1

The distribution of this data could best be described as

A. symmetrical
B. having no outliers
C. positively skewed
D. negatively skewed
E. bell shaped

Question 2

The median net weekly pay of people working in this office is between

A. $400 - $500
B. $500 - $600
C. $600 - $700
D. $700 - $800
E. $800 - $900

Question 3

The percentage of people in this office who earn $800 or more as their net weekly pay is closest to

A. 14.7%
B. 17.2%
C. 17.6%
D. 50%
E. 85.3%

Question 4

The results for a maths assignment for a Year 10 class are shown as an ordered stemplot below.

0	8
1	5
2	7 7
3	3 4 4 5 8 9
4	0 1 4 7 7
5	2 3 3 6 7
6	0 0

The mean mark for the assignment is closest to

A. 30
B. 39
C. 40.5
D. 40.9
E. 44

Question 5

The distribution of the weights of packets of Yim-Yum chocolate biscuits is approximately bell-shaped with a mean of 250 grams and a standard deviation of 3 grams.
The percentage of packets of Yim-Yum chocolate biscuits that weigh more than 253 grams is

A. 2.5%
B. 5%
C. 16%
D. 25%
E. 34%

Question 6

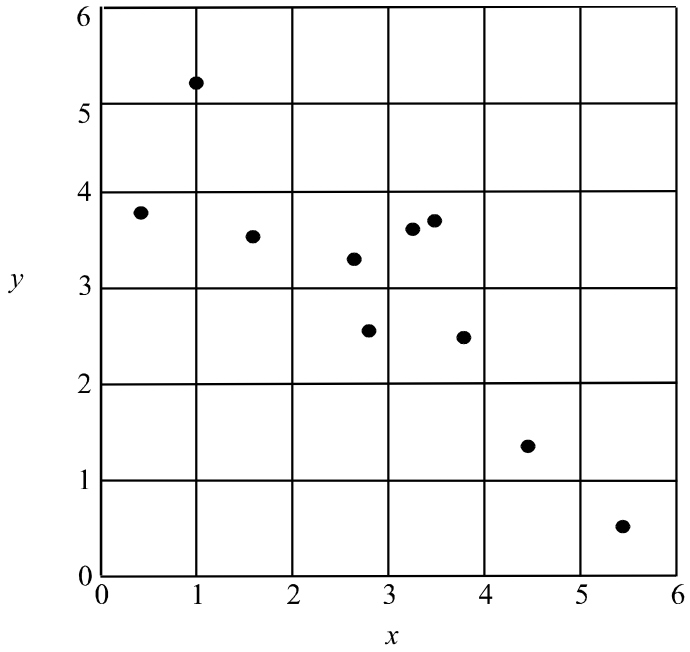
In a suburban street the usual number of occupants in each dwelling is displayed on the frequency table below.

Number of Occupants	Frequency
0	1
1	4
2	7
3	2
4	9
5	5
6	2

The standard deviation of the usual number of occupants in each dwelling is closest to

A. 1.6
B. 2.1
C. 2.9
D. 3.2
E. 12.7

The information below relates to questions 7 and 8.



The scatterplot above shows the relationship between variables *x* and *y*.

Question 7

Which one of the following groups of words could be best used to describe the relationship between variables *x* and *y*?

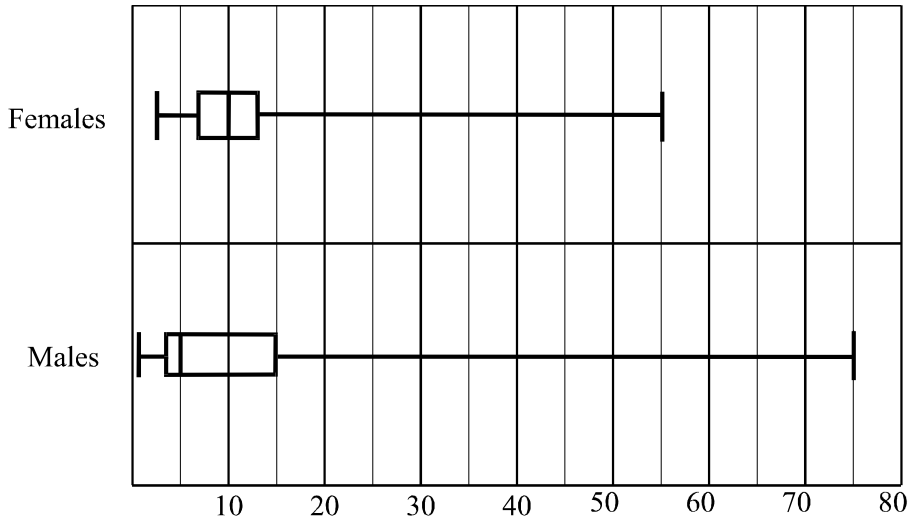
A. positive, moderate, linear
B. negative, moderate, linear
C. positive, weak, linear
D. negative, perfect, non-linear
E. positive, perfect, non-linear

Question 8

When a three-median regression line is fitted to this scatterplot, it intersects the *y*-axis at approximately

A. 3.5
B. 4
C. 4.5
D. 5
E. 5.5

The following information relates to Questions 9 and 10.



A survey of 50 males and 50 females, who had all had chickenpox, was carried out. The parallel boxplots above show the distribution of their age when they caught the disease and their gender.

Question 9

In this survey

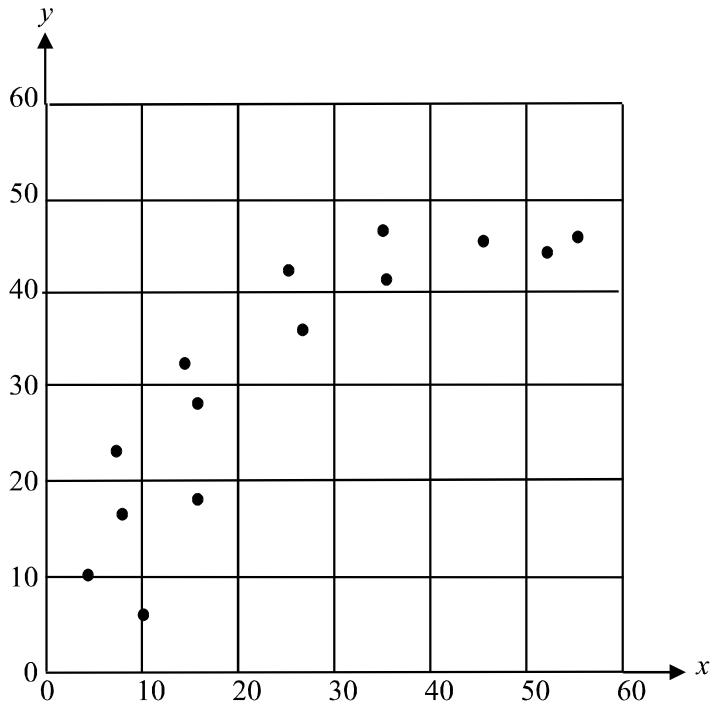
A. both variables are numerical
B. both variables are categorical
C. the variables are neither variable nor categorical
D. one variable is numerical but the other is not categorical
E. one variable is numerical and the other is categorical

Question 10

Which one of the following is **incorrect**?

A. The youngest person to have caught chickenpox was male.
B. The median age of males who had the disease was higher than the median age of females who had the disease.
C. More males had had chickenpox before the age of 5 than had females.
D. More females than males contracted the disease after the age of 10.
E. The interquartile range of ages of males was greater than that of females.

Question 11



If an attempt was made to linearize the data shown on the scatterplot above, it would be best to try a

A. y^2 or $\frac{1}{y}$ transformation

B. x^2 or $\frac{1}{x}$ transformation

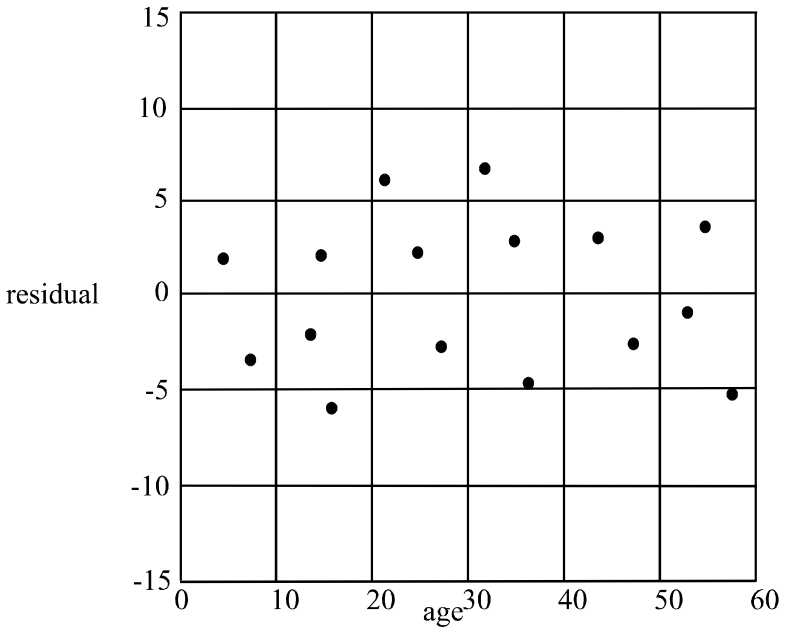
C. $\frac{1}{x}$ or $\log y$ transformation

D. $\log y$ or y^2 transformation

E. $\log x$ or y^2 transformation

Question 12

A group of 16 people undertake a general knowledge test. Their age together with the score they obtain is plotted on a scatterplot. A least squares regression line is fitted to the data and the corresponding residual plot is shown on the graph below.



Which one of the following statements is true?

A. The relationship between age and the residual is probably linear.
B. The relationship between the score obtained and the residual is probably linear.
C. The relationship between age and the score obtained is probably random.
D. The relationship between age and the score obtained is probably linear.
E. There is no relationship between age and score obtained.

Question 13

The seasonal indices for wetsuit sales at a chain of surf shops are shown in the table below.

	Summer	Autumn	Winter	Spring
Seasonal Index	1.47	0.91	0.61	1.01

If the chain of surf shops sold 798 wetsuits in winter then the deseasonalized number of wetsuits sold in winter was closest to

A. 121
B. 487
C. 877
D. 790
E. 1308

Section B

Module 1: Number patterns and applications

If you choose this module all questions must be answered.

Question 1

For the sequence

11, 19, 27, 35,…

the sum of the first 12 terms is

A. 99
B. 220
C. 594
D. 660
E. 708

Question 2

At a lecture there are 689 people in attendance. Of these 286 are men.
What is the ratio of men to women at the lecture?

A. 22 : 31
B. 22 : 53
C. 31 : 53
D. 31 : 84
E. 42 : 79

Question 3

The second term of an arithmetic sequence is 14 and the fourth is 44.
The first term is

A. –16
B. –1
C. 7
D. 10
E. 29

Question 4

Which one of the following is not a geometric sequence?

A. 2, 2, 2, 2,…
B. $7, 7^2, 7^3, 7^4, ...$
C. $-1, 2, -4, 8, ...$
D. 1.2, 1.3, 1.4, 1.5,…
E. 1000, 10, 0.1, 0.001,…

Question 5

Enrolments at Parkrange Primary School have increased by 7% each year since 2001 when there were 342 students enrolled. How many students were enrolled at the school in 2005?

A. 354
B. 381
C. 419
D. 448
E. 480

Question 6

Harry and his mate are digging out a cellar. On the first day they dig down 1 metre, on the second day they dig down a further 0.6 metre and on the third day they dig down a further 0.36 metre. If they were to continue digging forever in this pattern, how far down in metres would the cellar go?

A. 1.52
B. 2.2
C. 2.5
D. 3.43
E. 6

Question 7

Kate, who is a laboratory assistant, needs to make up a 12% salt solution. How much water should she add to 3 litres of an existing 20% salt solution?

A. 1.2 litres
B. 1.8 litres
C. 2 litres
D. 5 litres
E. 8 litres

Question 8

A sequence is described by the difference equation

$$t_{n+1} = 2t_n \text{ where } t_1 = 5$$

The n^{th} term in the sequence is given by

A. $t_n = 2n$

B. $t_n = 5n$

C. $t_n = 5 + 2n$

D. $t_{\overline{n}} = 2 \times 5^{n-1}$

E. $t_n = 5 \times 2^{n-1}$

Question 9

On September 1, Jane pays $5 000 into an investment account that earns annual interest of 8% per annum on 31 August each year. The interest earned stays in the account. Jane contributes another $2 000 to the fund on September 1 each year after that.
A difference equation that gives the amount A_n, in dollars, in Jane's fund, *n* years after her first deposit, is given by

A. $A_{n+1} = 0 \cdot 08A_n + 2000$ where $A_0 = 5000$

B. $A_{n+1} = 0 \cdot 08A_n + 5000$ where $A_0 = 5000$

C. $A_{n+1} = 0 \cdot 08(A_n + 2000)$ where $A_0 = 5000$

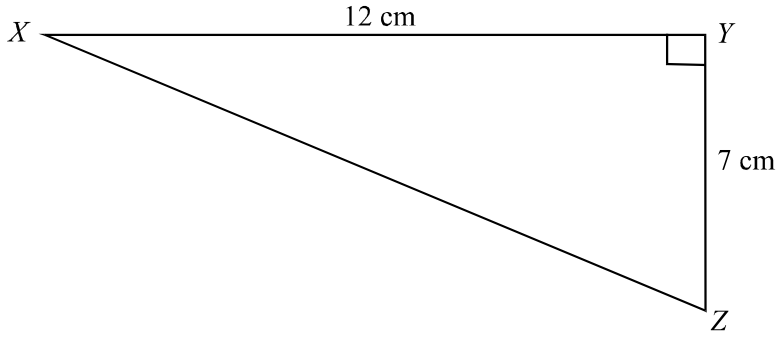
D. $A_{n+1} = 1 \cdot 08A_n + 2000$ where $A_0 = 5000$

E. $A_{n+1} = 1 \cdot 08(A_n + 2000)$ where $A_0 = 5000$

Module 2: Geometry and trigonometry

If you choose this module all questions must be answered.

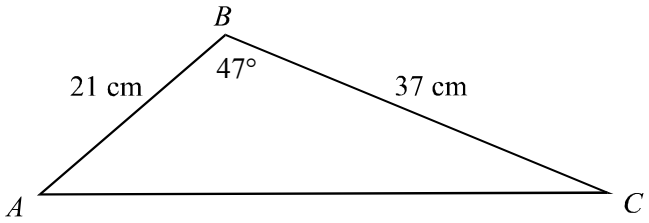
Question 1



In the right angled triangle XYZ, $XY = 12\text{cm}$ and $YZ = 7\text{cm}$.
The angle YXZ is closed to

A. 30°
B. 36°
C. 42°
D. 54°
E. 60°

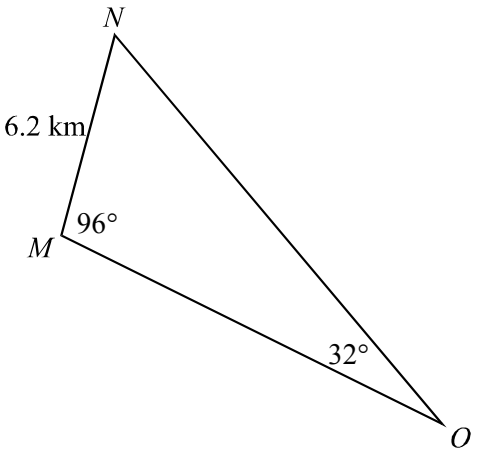
Question 2



The area of triangle ABC in square centimetres is closest to

A. 142
B. 265
C. 284
D. 417
E. 15 059

Question 3

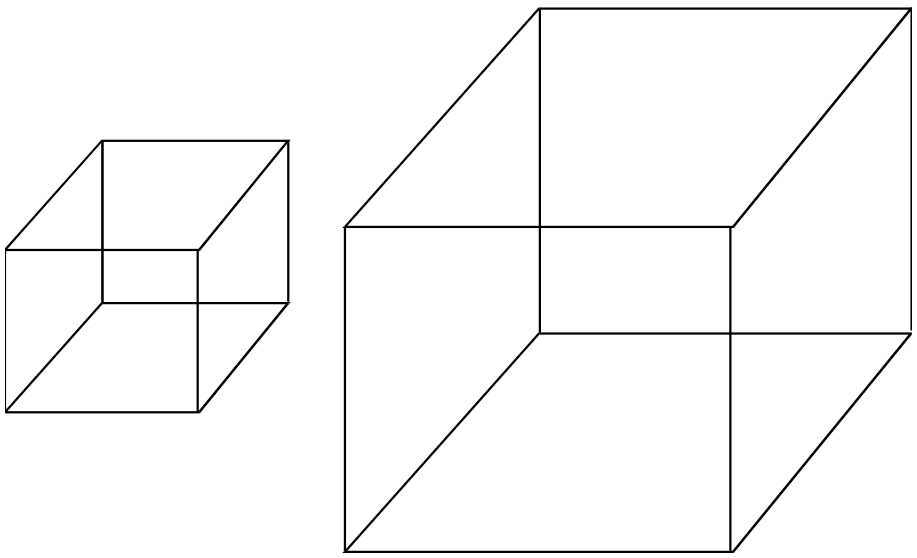


In triangle *MNO*, the sidelength *NO*, in kilometres, is closest to

A. 8.5
B. 11.6
C. 13.2
D. 15.1
E. 18.9

Question 4

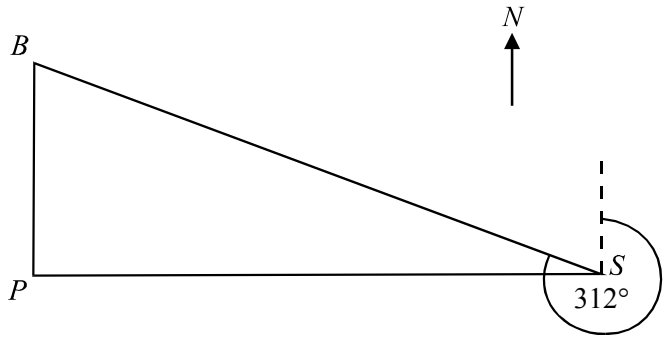
The sidelength of the larger cube shown is double that of the smaller cube shown.



The ratio of the volume of the smaller cube to the larger cube is

A. 1 : 2
B. 1 : 3
C. 1 : 4
D. 1 : 8
E. 1 : 27

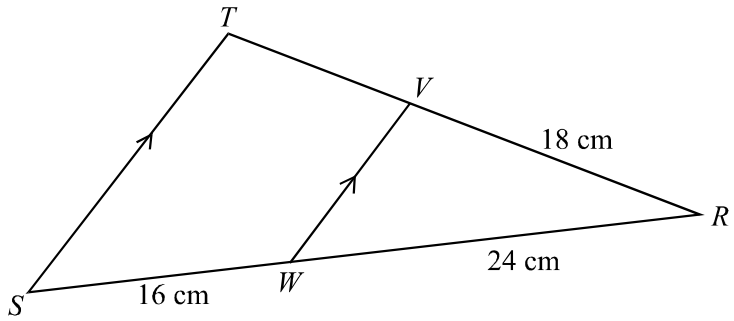
Question 5



In a town, the bank at *B* lies due north of the post office at *P* and the police station at *S* lies due east of the post office at *P*. The bearing of the bank from the police station at *S* is 312°. The bearing of the police station at *S*, from the bank at *B* is

A. 42°
B. 48°
C. 132°
D. 138°
E. 312°

Question 6

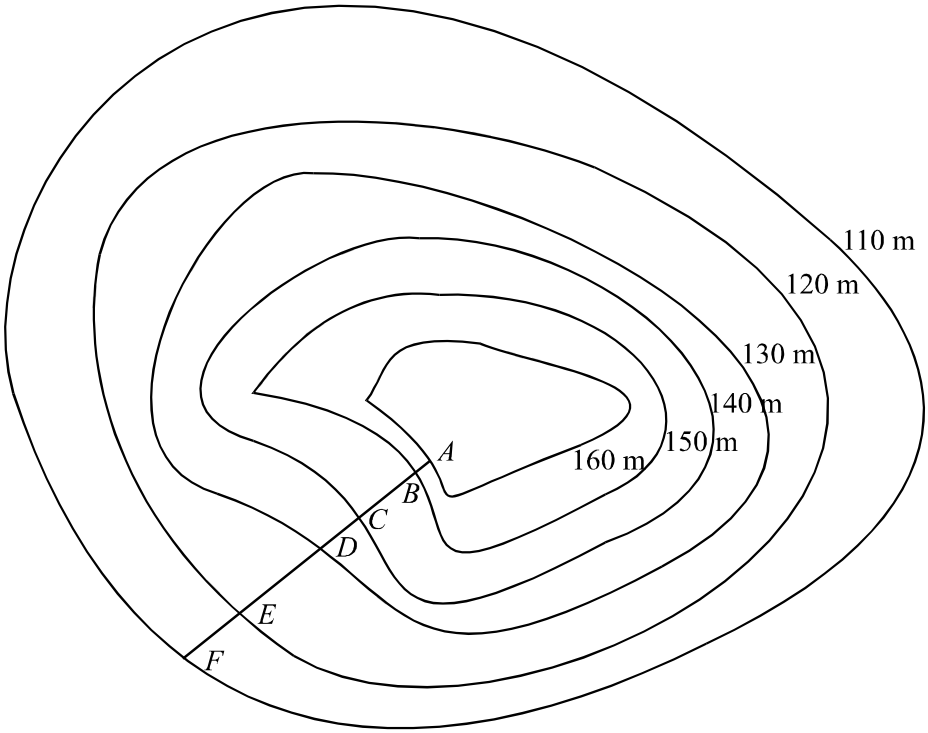


In the diagram above, *ST* is parallel to *WV*.
Also, $WR = 24\text{cm}$, $SW = 16\text{cm}$ and $VR = 18\text{cm}$.

The length of *TV* in centimetres is

A. 8.25
B. 9.75
C. 12
D. 13
E. 13.5

Question 7

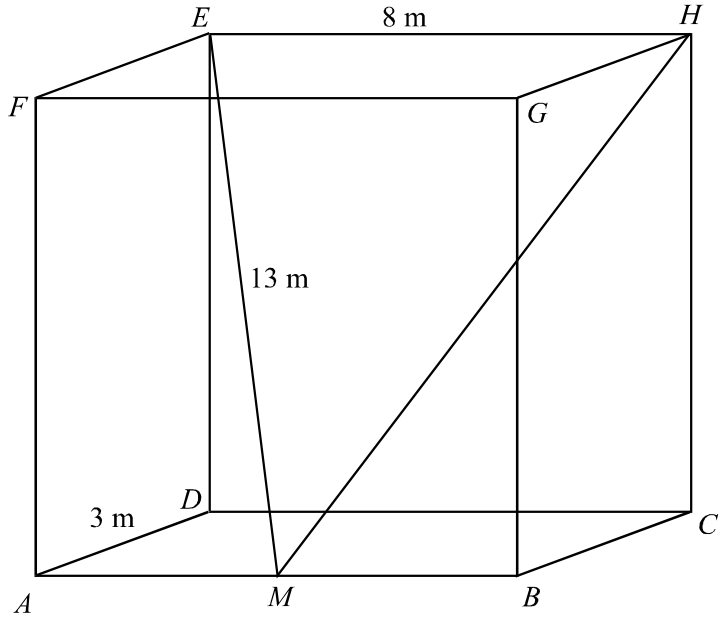


The points A, B, C, D, E and F, lie on the contour map as shown.

The **least** steep section of the hill along the line AF is

A. AB
B. BC
C. CD
D. DE
E. EF

The information below relates to questions 8 and 9.



The diagram above shows a rectangular prism with length 8m, depth 3m, and $EM = 13\text{m}$. Point *M* is the mid-point of *AB*.

Question 8

The height of the prism, in metres is

A. 5
B. 8
C. 9
D. 10
E. 12

Question 9

Let angle $EMH = \theta$. It is true to say that $\cos\theta$ is equal to

A. $\dfrac{13}{8}$

B. $\dfrac{8}{13 \times 13}$

C. $\dfrac{13^2 + 8^2}{2 \times 13 \times 8}$

D. $\dfrac{13^2 + 13^2}{2 \times 13 \times 8}$

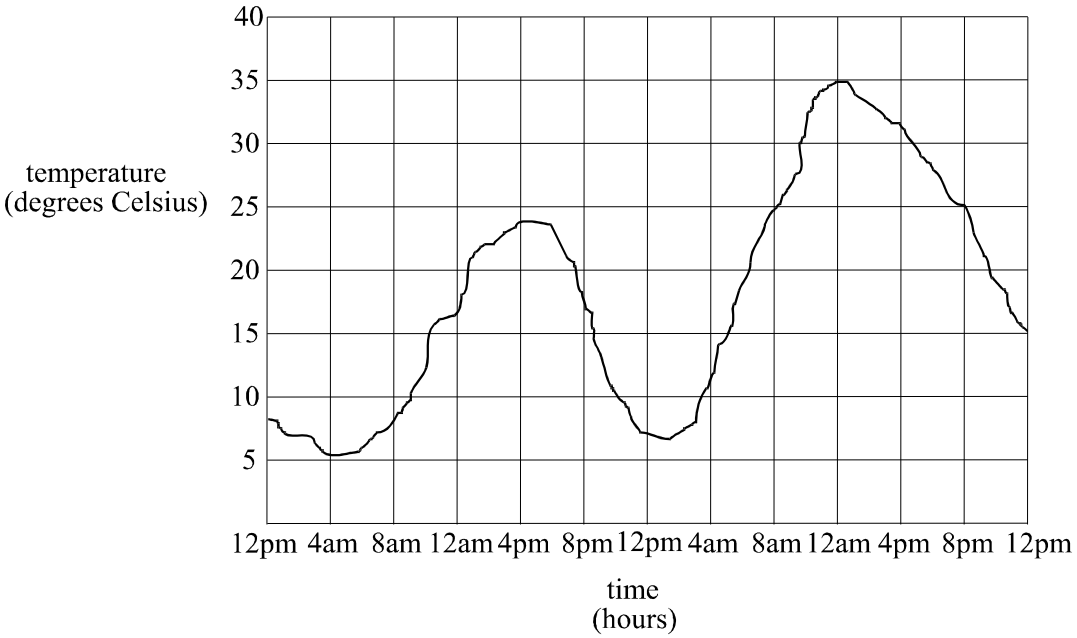
E. $\dfrac{13^2 + 13^2 - 8^2}{2 \times 13^2}$

Module 3: Graphs and relations

If you choose this module all questions must be answered.

The information below relates to Questions 1 and 2.

The graph below shows the variation of temperature in Bendigo over a 48 hour period.



Question 1

During the 48 hour period, the temperature in Bendigo was 25°C or over for a period of

A. 0 hours
B. 3 hours
C. 4 hours
D. 10 hours
E. 12 hours

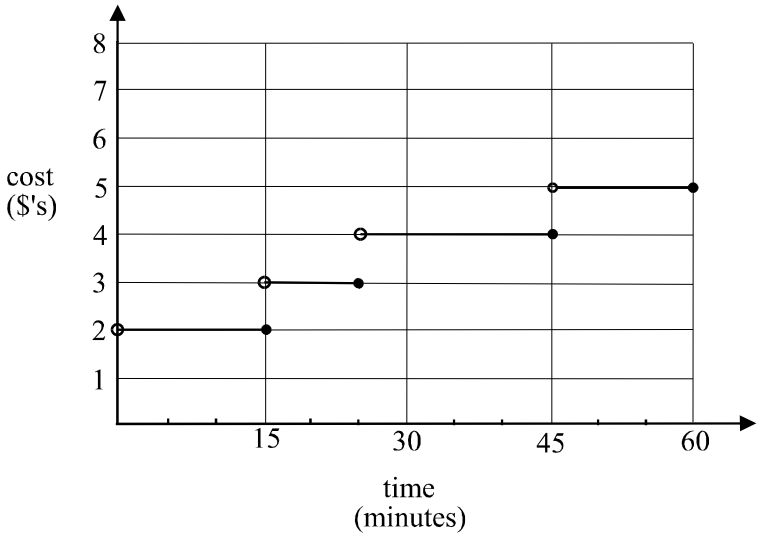
Question 2

The time that elapsed between when the maximum in the first 24 hour period occurred and when the maximum in the second 24 hour period occurred is closest to

A. 8 hours
B. 12 hours
C. 20 hours
D. 24 hours
E. 26 hours

Question 3

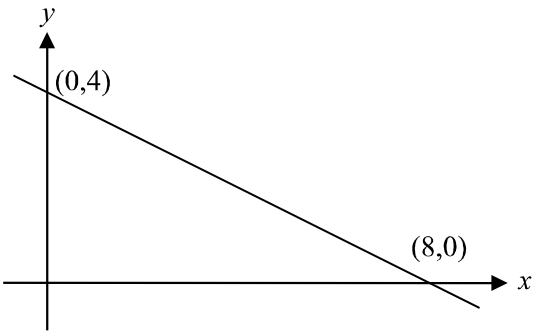
The graph below shows the cost in dollars of using a computer terminal to access the internet at a café for periods up to an hour.



Hartmut and his friend Steffi were at side by side terminals each using the internet. Hartmut's internet connection lasted 32 minutes and Steffi's lasted 20 minutes.
The total cost for the pair was

A. \$3
B. \$4
C. \$5
D. \$6
E. \$7

Question 4

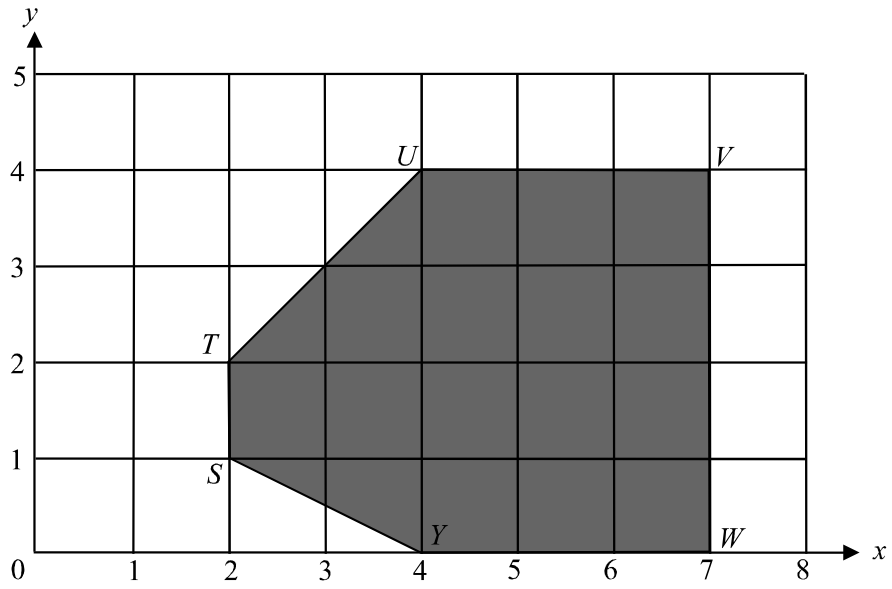


Which one of the following points lies on the line shown above?

A. $(1,3)$
B. $(2,2)$
C. $(2,4)$
D. $(4,2)$
E. $(4,4)$

The information below relates to questions 5 and 6.

The shaded region below (with boundaries included) shows the feasible region in a linear programming question with the corner points marked *S, T, U, V, W* and *Y*.



Question 5

The inequality that does not include a boundary of this shaded region is

A. $x \geq 2$
B. $y \geq 0$
C. $y \leq x$
D. $y \leq x + 4$
E. $y \geq -\frac{1}{2}x + 2$

Question 6

For the feasible region given, the minimum value of $C = x - 3y$ occurs at the corner point

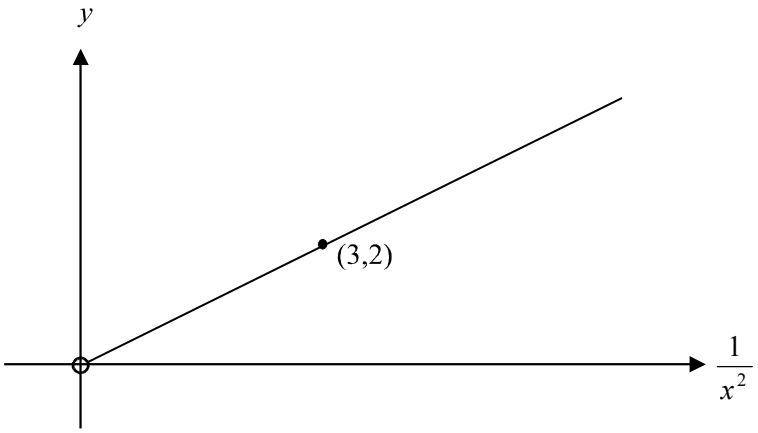
A. U
B. W
C. Y
D. S
E. T

Question 7

The charge *C*, in dollars made by a portrait photographer is given by $C = mx + n$ where *m* is the cost per portrait printed, *x* is the number of portraits printed and *n* is the sitting fee.
Kate has 5 portraits printed and the cost is $185. Keith has 2 portraits printed and the cost is $125.
The charge for the sitting fee is

A. $20
B. $35
C. $60
D. $75
E. $85

Question 8



For the graph above, *y* is plotted against $\frac{1}{x^2}$ for $x > 0$. The relation between *x* and *y* is

A. $y = \frac{5}{x^2}$
B. $y = \frac{18}{x^2}$
C. $y = \frac{2}{3x^2}$
D. $y = \frac{3}{2x^2}$
E. $y = \frac{3}{5x^2}$

Question 9

Bill runs two businesses; a window cleaning business and a gardening business. Bill devotes up to 20 hours a week to the window cleaning business and at least 15 hours a week to the gardening business. Bill can work a maximum of 50 hours a week. Bill's brother Wally can work up to 10 hours a week for Bill in his window cleaning business when there is a lot of work on.
Let x be the number of hours a week devoted to the window cleaning business.
Let y be the number of hours a week devoted to the gardening business.
The constraints imposed by the number of hours that Bill and Wally can devote to the two businesses are given by

A. $x \leq 20,\ y \leq 15,\ x + y \leq 50$
B. $x \geq 20,\ y \geq 15,\ x + y \geq 50$
C. $x \leq 20,\ y \leq 15,\ x + y \leq 50$
D. $x \leq 30,\ y \geq 15,\ x + y \leq 60$
E. $x \geq 30,\ y \leq 15,\ x - y \leq 60$

Module 4: Business-related mathematics

If you choose this module all questions must be answered.

Question 1

Georgia invests $22 000 in an account that earns simple interest. After 3 years, the total amount of interest earned on this account is $3 960. The annual rate of interest on this account is

A. 2%
B. 3%
C. 6%
D. 9%
E. 16%

Question 2

Patrick invested $9 500 in an account earning interest of 8% compounding quarterly. The value of Patrick's investment after 5 years was

A. $9 887.31
B. $10 488.77
C. $14 116.50
D. $23 639.04
E. $364 207.20

Question 3

A company car was purchased brand new for $42 700. It is depreciated according to the unit cost method at 21 cents per kilometre driven. The car will be traded in when its book value is $25 000. The number of kilometres that the car will be driven before it is traded in is closest to

A. 17 700
B. 84 286
C. 119 048
D. 203 333
E. 371 700

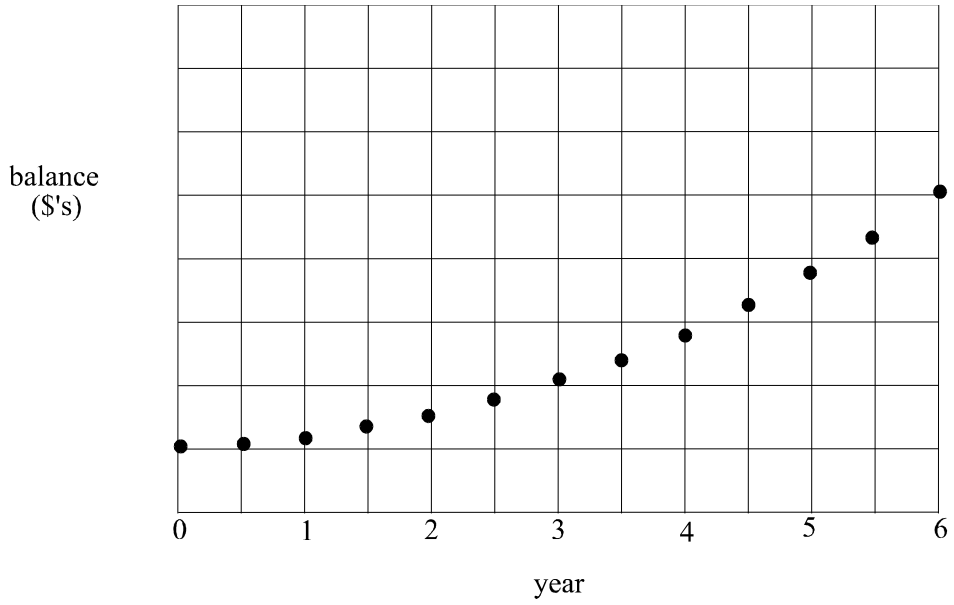
Question 4

Tony invests $5 500 for 7 years at an interest rate of 6% per annum compounding annually. The amount of interest Tony earns in the fifth year of the investment is

A. $416.62
B. $872.14
C. $1 443.62
D. $1 860.24
E. $7 360.24

Question 5

The graph below shows the balance, in dollars, of an investment account at 6 monthly intervals. The account earned the same fixed rate of interest for the entire 6 years.



The graph describes

A. simple interest being calculated on the original sum invested and added to the account each 6 months
B. simple interest being calculated on the original sum invested and added to the account each year
C. compound interest that is being calculated each 6 months
D. compound interest that is being calculated each year
E. compound interest that is being calculated every 2 years

The information below relates to Questions 6 and 7.

Sudhir buys a plasma television that retails for $4 300. He agrees to pay a $600 deposit and fortnightly repayments of $90 over two years.

Question 6

What is the total amount of interest that Sudhir pays for his plasma television?

A. $380
B. $980
C. $1360
D. $2940
E. $5280

Question 7

The annual effective rate of interest that Sudhir is being charged is closest to

A. 22%
B. 26%
C. 33%
D. 44%
E. 52%

Question 8

David borrowed $80 000 at 9% per annum compounding monthly. His repayments are $720 per month.
After 3 years the balance of the loan is closest to

A. $65 387.91
B. $69 621.14
C. $72 493.28
D. $75 061.67
E. $79 637.29

Question 9

A loan of $30 000 is taken out at an interest rate of 8% per annum compounding quarterly. Quarterly repayments of $1 834.70 are made.
This loan will be fully paid off after

A. 1 year
B. 3 years
C. 4 years
D. 5 years
E. 20 years

Module 5: Networks and decision mathematics

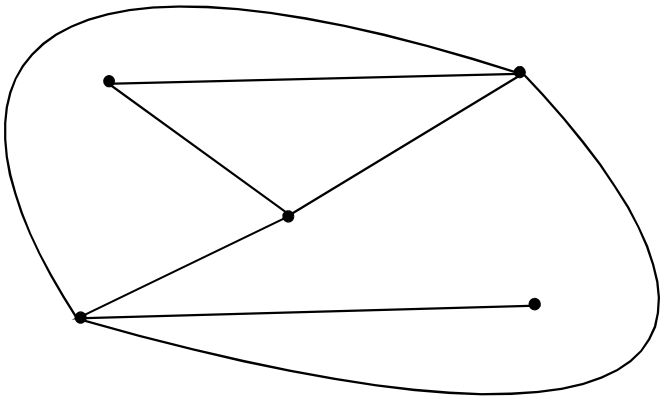
If you choose this module all questions must be answered.

Question 1

A graph that is connected and planar has 5 faces and 13 edges. The number of vertices it has is

A. 6
B. 10
C. 16
D. 20
E. 21

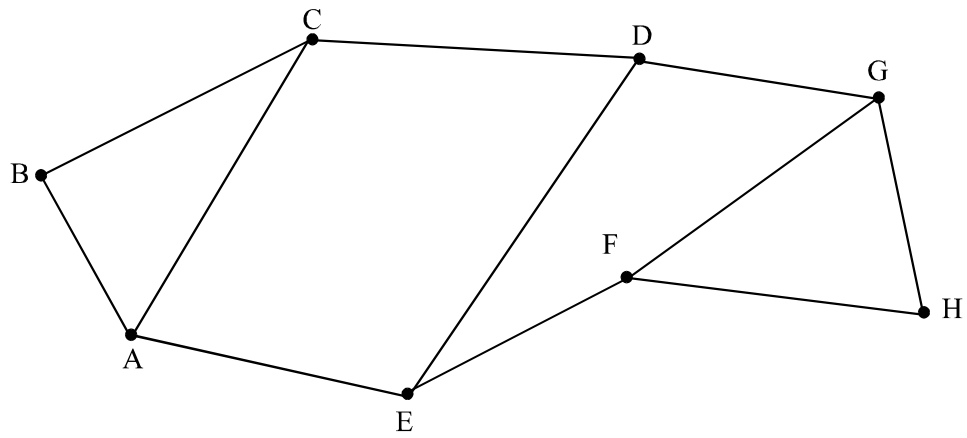
Question 2



The sum of the degrees of all the vertices in the network shown above is

A. 5
B. 12
C. 13
D. 14
E. 15

Question 3

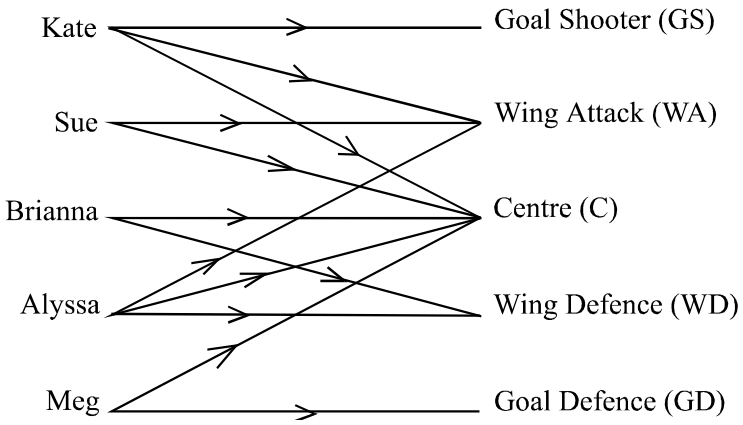


Which one of the following describes a Hamiltonian path for the graph above?

A. ABCDEFGH
B. ABCADGHFEA
C. ABCAEFHGD
D. ABCAEFHGDCA
E. AEFGHFEDC

Question 4

The bipartite graph below shows the positions that five team members can play in a netball team.



A suitable allocation of positions would be

A.

Kate	WA
Sue	GS
Brianna	C
Alyssa	WD
Meg	GD

B.

Kate	C
Sue	WA
Brianna	C
Alyssa	GD
Meg	WD

C.

Kate	GS
Sue	WA
Brianna	C
Alyssa	WD
Meg	GD

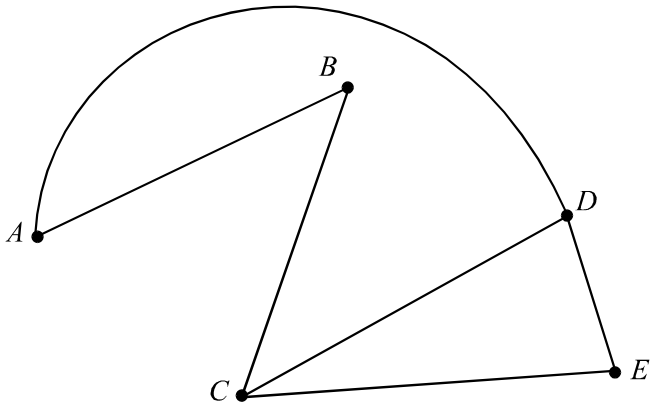
D.

Kate	WA
Sue	C
Brianna	WD
Alyssa	GS
Meg	GD

E.

Kate	GS
Sue	WA
Brianna	GD
Alyssa	WD
Meg	C

Question 5



Which one of the following adjacency matrices could represent the above graph?

A.

$$\begin{bmatrix} 2 & 0 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 3 & 0 & 0 \\ 0 & 0 & 0 & 3 & 0 \\ 0 & 0 & 0 & 0 & 2 \end{bmatrix}$$

B.

$$\begin{bmatrix} 1 & 0 & 1 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 1 & 0 \\ 1 & 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & 1 \end{bmatrix}$$

C.

$$\begin{bmatrix} 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

D.

$$\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 \end{bmatrix}$$

E.

$$\begin{bmatrix} 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 1 \\ 1 & 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 \end{bmatrix}$$

Question 6

Four different copying machines A – D can be used to complete four different jobs 1 – 4 in a large office.
The cost, in dollars, of completing each of the tasks on each of the machines is shown on the table below.

	printer/copier			
job	A	B	C	D
1	3	2	1	2
2	4	2	3	5
3	2	3	4	2
4	3	3	4	4

If each is allocated one of the jobs, which of the following allocations provides the minimum cost for completing all four jobs?

A.

job	**copier**
1	C
2	B
3	D
4	A

B.

job	**copier**
1	B
2	C
3	A
4	D

C.

job	**copier**
1	A
2	B
3	C
4	D

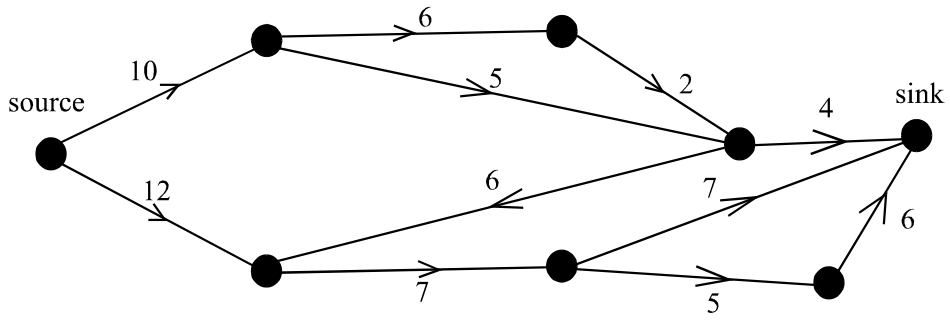
D.

job	**copier**
1	D
2	C
3	A
4	B

E.

job	**copier**
1	C
2	B
3	A
4	D

Question 7

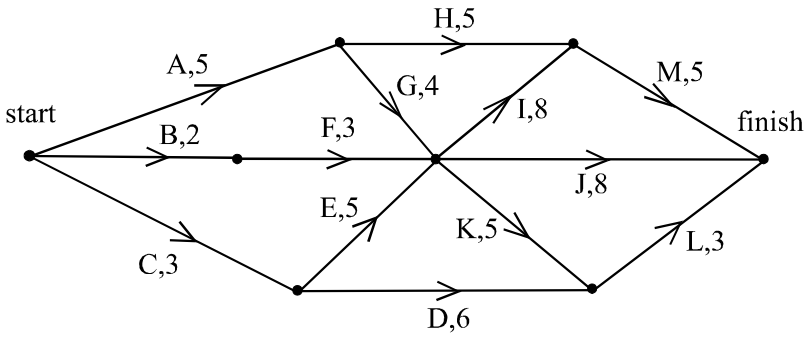


The maximum flow through the network above is

A. 14
B. 16
C. 18
D. 21
E. 27

The information below relates to questions 8 and 9.

The graph below show the activities and their completion time, in weeks, required to complete a major building project.



Question 8

The critical path for this network is

A. A, H, M,
B. A, G, J
C. A, G, I, M
D. B, F, J
E. C, D, L

Question 9

Which one of the following activities can be delayed the longest without delaying the completion of the project?

A. A
B. B
C. C
D. D
E. E

Further Mathematics Formulas

Business-related mathematics

simple interest: $I = \dfrac{PrT}{100}$

compound interest: $A = PR^n$ where $R = 1 + \dfrac{r}{100}$

hire purchase: effective rate of interest $\approx \dfrac{2n}{n+1} \times$ flat rate

annuities: $A = PR^n - \dfrac{Q(R^n - 1)}{R - 1}$, where $R = 1 + \dfrac{r}{100}$

Geometry and trigonometry

area of a triangle: $\dfrac{1}{2}bc\sin A$

area of circle: πr^2

volume of a sphere: $\dfrac{4}{3}\pi r^3$

volume of a cone: $\dfrac{1}{3}\pi r^2 h$

Pythagoras' theorem $c^2 = a^2 + b^2$

sine rule: $\dfrac{a}{\sin A} = \dfrac{b}{\sin B} = \dfrac{c}{\sin C}$

cosine rule: $c^2 = a^2 + b^2 - 2ab\cos C$

Graphs and relations

Straight line graphs

gradient: $m = \dfrac{y_2 - y_1}{x_2 - x_1}$

equation: $y - y_1 = m(x - x_1)$ gradient-point form

$y = mx + c$ gradient-intercept form

$\dfrac{y - y_1}{x - x_1} = \dfrac{y_2 - y_1}{x_2 - x_1}$ two-point form

Number patterns and applications

arithmetic series: $a + (a+d) + \ldots + (a+(n-1)d) = \frac{n}{2}[2a + (n-1)d] = \frac{n}{2}(a+l)$

geometric series: $a + ar + ar^2 + \ldots + ar^{n-1} = \frac{a(1-r^n)}{1-r}, \ r \neq 1$

infinite geometric series: $a + ar + ar^2 + ar^3 + \ldots = \frac{a}{1-r}, \ |r| < 1$

linear difference equations: $t_n = at_{n-1} + b = a^{n-1}t_1 + b\frac{(a^{n-1}-1)}{a-1}, \ a \neq 1$

$= a^n t_0 + b\frac{(a^n - 1)}{a-1}$

Networks and decision mathematics

Euler's formula: $v + f = e + 2$

Statistics

seasonal index: $\text{seasonal index} = \frac{\text{actual figure}}{\text{deseasonalised figure}}$

FURTHER MATHEMATICS

TRIAL EXAMINATION 1

MULTIPLE- CHOICE ANSWER SHEET

STUDENT NAME:.....

INSTRUCTIONS

Fill in the letter that corresponds to your choice. Example: (A) (B) (C) (D) (E)

The answer selected is B. Only one answer should be selected.

Section A - Core

1. (A) (B) (C) (D) (E)
2. (A) (B) (C) (D) (E)
3. (A) (B) (C) (D) (E)
4. (A) (B) (C) (D) (E)
5. (A) (B) (C) (D) (E)
6. (A) (B) (C) (D) (E)
7. (A) (B) (C) (D) (E)
8. (A) (B) (C) (D) (E)
9. (A) (B) (C) (D) (E)
10. (A) (B) (C) (D) (E)
11. (A) (B) (C) (D) (E)
12. (A) (B) (C) (D) (E)
13. (A) (B) (C) (D) (E)

Section B - Modules

Module Number ___

1. (A) (B) (C) (D) (E)
2. (A) (B) (C) (D) (E)
3. (A) (B) (C) (D) (E)
4. (A) (B) (C) (D) (E)
5. (A) (B) (C) (D) (E)
6. (A) (B) (C) (D) (E)
7. (A) (B) (C) (D) (E)
8. (A) (B) (C) (D) (E)
9. (A) (B) (C) (D) (E)

Module Number ___

1. (A) (B) (C) (D) (E)
2. (A) (B) (C) (D) (E)
3. (A) (B) (C) (D) (E)
4. (A) (B) (C) (D) (E)

5. (A) (B) (C) (D) (E)
6. (A) (B) (C) (D) (E)
7. (A) (B) (C) (D) (E)
8. (A) (B) (C) (D) (E)
9. (A) (B) (C) (D) (E)

Module Number ___

1. (A) (B) (C) (D) (E)
2. (A) (B) (C) (D) (E)
3. (A) (B) (C) (D) (E)
4. (A) (B) (C) (D) (E)
5. (A) (B) (C) (D) (E)
6. (A) (B) (C) (D) (E)
7. (A) (B) (C) (D) (E)
8. (A) (B) (C) (D) (E)
9. (A) (B) (C) (D) (E)