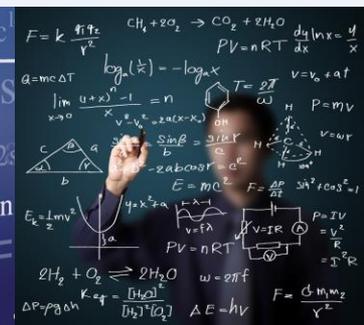
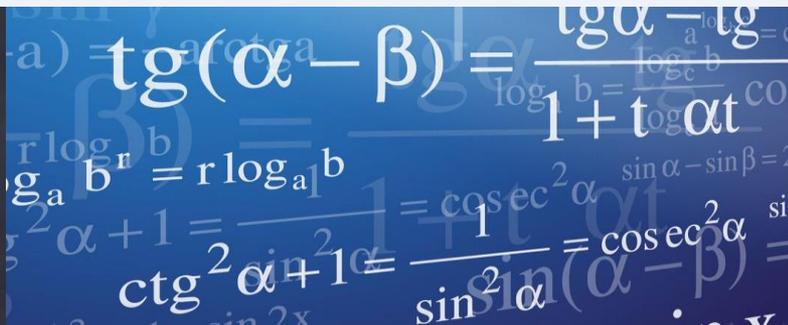
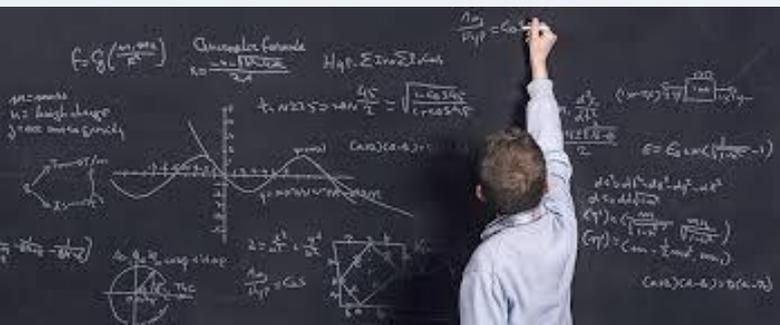


EDB Center of Excellence – Profession Development Program  
教育局資訊科技卓越教學中心 – 教師專業發展活動

# How To Use Tablet Computer in Secondary Mathematics Education

## 如何運用平板電腦於中學數學教育

Tsung Tsin College  
Mr. Wu Man On, Joseph  
Mr. Pong Hai Lin



# Process of Instructions

1. Concepts Teaching
2. Examples Demonstration
3. Calculation Practices
4. Feedback
5. Administration



**Information Technologies**



# Screen Mirroring



# Different Strategies of IT in Education

## Locational-Based Learning System

- QR Code + Google Form...
- (Inquiry Based Learning)

## Classroom Responses System

- NearPod
  - Socrative
  - Plickers...
- (Interactive T&L)

## Learning Management System

- Schoology
  - Edmodo
  - Moodle...
- (Flipped Learning)

## E-Text Book

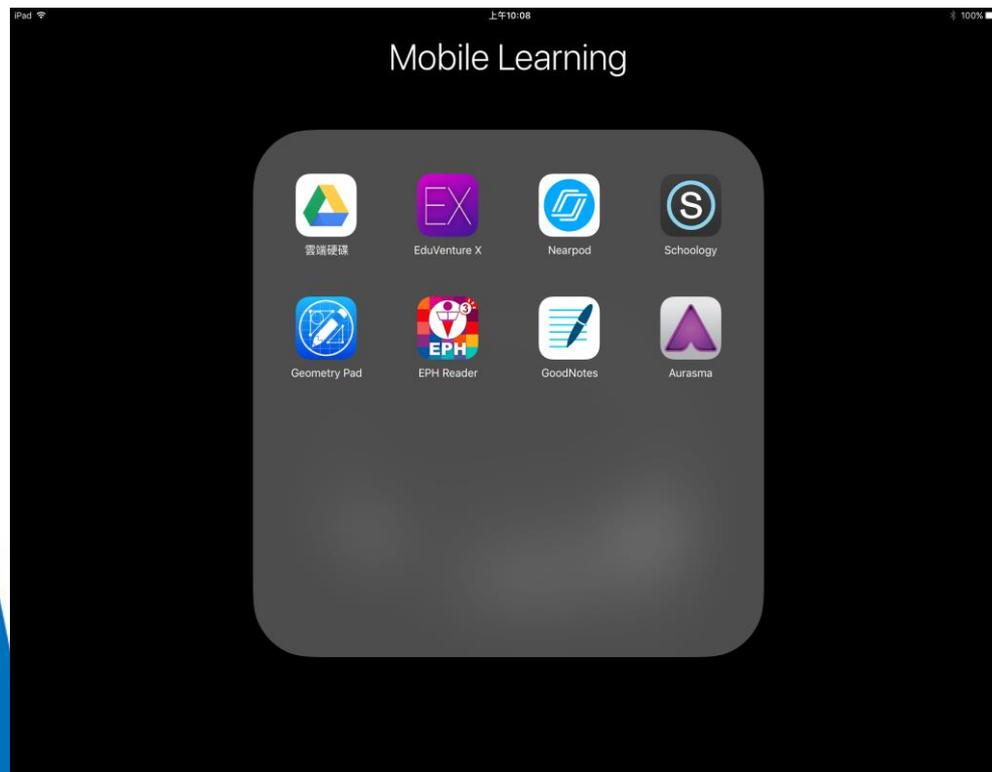
- CamScanner
  - Book Creator
  - Publishers...
- (Direct Teaching)

## On-Line Learning Resources

- Google Apps
  - Office 365
  - HKed City...
- (Self-directed Learning)

## Subject Content Apps

- GeoGebra
  - Chemist
  - Desmos...
- (Inquiry Based Learning)



## Idea Presentation Apps

- Doceri
  - Explain Everything
  - Popplet
- (Flipped Learning)

## AR and VR Teaching

- Google Street View
  - Aursma
  - HTC Vive
- (Inquiry Based Learning)



Write On PDF

類別

- 未分類
- S3 mathematics
- S4 mathematics
- 垃圾桶

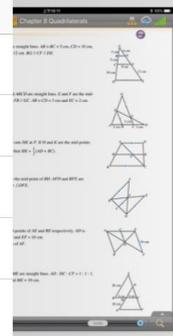


Image (5)  
昨日 上午10:51

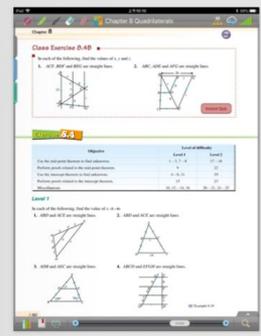


Image (4)  
昨日 上午10:43

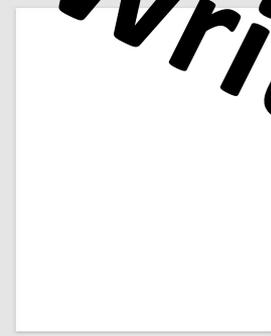


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昨日 上午10:15

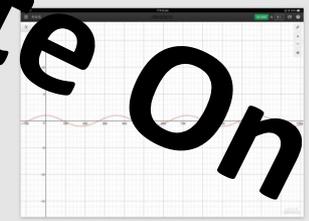


Image (2)  
昨日 上午9:12

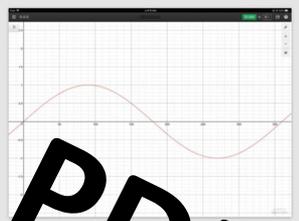
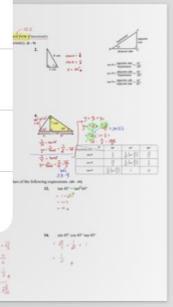
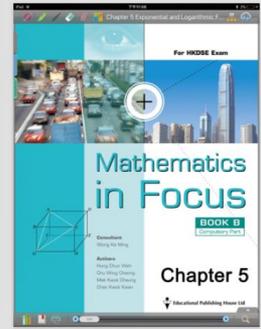


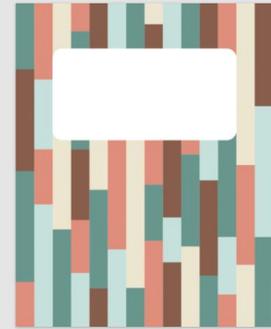
Image  
2018年3月2日 上午11:55



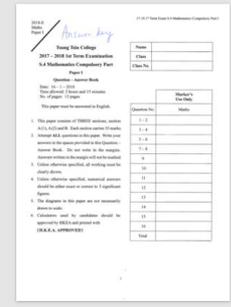
Chapter 6 Trigonometry  
warmup exercise  
2018年2月28日 下午12:31



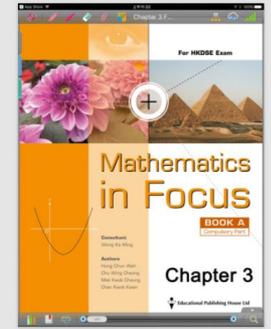
S4-Ch5  
2018年2月26日 下午12:28



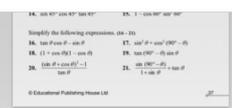
筆記本 (5)  
2018年1月18日 上午10:45



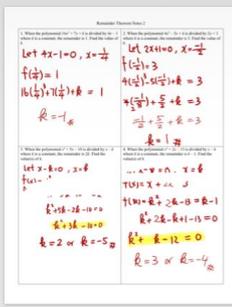
math1718 S4 1ST EXAM  
P1(answer)  
2018年1月18日 上午9:31



S4 Chapter 3  
2018年1月15日 下午3:43



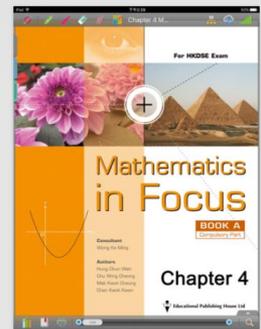
BkB\_ch06\_con\_e  
2018年3月2日 上午8:54



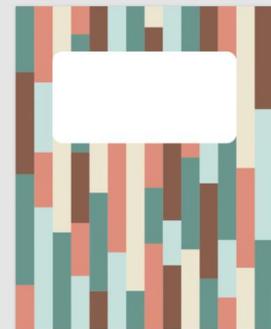
Remainder Theorem Notes  
2  
2018年1月15日 下午3:40



筆記本 (4)  
2018年1月15日 下午3:33



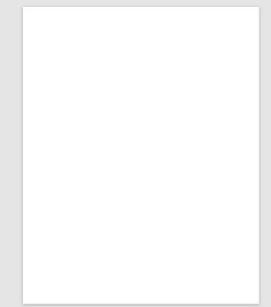
S4 Chapter 5 (2)  
2018年1月10日 下午3:31



筆記本 (3)  
2017年12月20日 上午11:46



MATH\_1617\_S4\_EXAM1\_P2\_  
QUESTION\_AND\_ANSWER  
2017年12月12日 上午11:24



新檔案  
2620171128083620235  
2017年12月8日 下午2:34

**(a)**  $\log (x + 2) - \log (x + 1) = \log 3$

$$\log \frac{x + 2}{x + 1} = \log 3$$

$$\frac{x + 2}{x + 1} = 3$$

$$x + 2 = 3x + 3$$

$$2x = -1$$

$$x = \underline{\underline{-\frac{1}{2}}}$$



# 我的文檔

## 我的文檔 (34)

$1 = 0$

$a = 1$

$MN = \log_a M + \log_a N$

$\frac{M}{N} = \log_a M - \log_a N$

$M^k = k \log_a M$ , for any real  $M$

新檔案 34  
18-02-06 11:13

3. Round off the following numbers to 3 significant figures.

(a) 4125 (b) 53.672 (c) 0.734 8 (d) 0.012 96 (e) 52.965 1 (f) 1.998 8

(g) 4215 + 222.000 cm to 3 sig. fig. (h) 51.675 + 22.200 cm to 3 sig. fig. (i) 0.734 8 + 22.200 cm to 3 sig. fig. (j) 0.012 96 + 22.200 cm to 3 sig. fig. (k) 52.965 1 + 22.200 cm to 3 sig. fig. (l) 1.998 8 + 22.200 cm to 3 sig. fig.

4. Round off 0.023 395 to (a) 1 significant figure, (b) 2 significant figures, (c) 3 significant figures, (d) 4 significant figures.

5. Round off 0.023 395 to (a) 1 significant figure, (b) 2 significant figures, (c) 3 significant figures, (d) 4 significant figures.

新檔案 33  
18-01-19 14:18

中文電腦教育 中文輸入法筆記 (第一版節)

姓名: ( ) 班別: ( )

建國輸入法自學參考網址: <http://www.sz2000.com/hkselfstudy/>  
中文輸入法教學網址: <http://resources.edu.hk/lapwax/>

學習重點

1. 認識香港輸入法和相關的概念。  
2. 學習書寫 24 個字序，包括：  
(1) 聲母韻 (2) 聲母韻 (3) 聲母韻 (4) 字序韻

一、認識香港輸入法和相關的概念  
香港輸入法的原理，俗稱「一鍵一音」，只要我們懂得將中文字以特定規則排列，然後將之組合，便可以輸入一個漢字。

新檔案 32  
18-01-15 15:48

1. In the figure,  $AB \parallel DE$ ,  $BF$  and  $CD$  are straight lines,  $\angle BAC = 17^\circ$ ,  $\angle ABC = 28^\circ$  and  $\angle CDE = 23^\circ$ . Prove that  $CF$  is an altitude of  $\triangle ACE$ .

2. In the figure,  $P$  and  $Q$  are points on  $AC$  and  $BC$  respectively such that  $BP$  and  $AQ$  are altitudes of  $\triangle ABC$ .  $AQ$  and  $BP$  intersect at  $O$ . If  $\angle AOP = 34^\circ$  and  $\angle BOP = 28^\circ$ , find  $\angle C$ .

3. In the figure,  $P$  and  $Q$  are points on  $AC$  and  $BC$  respectively such that  $BP$  and  $AQ$  are altitudes of  $\triangle ABC$ .  $AQ$  and  $BP$  intersect at  $O$ . If  $\angle AOP = 34^\circ$  and  $\angle BOP = 28^\circ$ , find  $\angle C$ .

新檔案 31  
17-12-21 14:08

$y = 15x^2 - 63x + 7$

新檔案 30  
17-12-19 08:27

新檔案 29  
17-12-07 14:54

姓名	英文姓名	性別	日期	完成	評語	簽名
1	CHAN CHING BANG	陳穎彤	女	X		
2	CHAN JANG CHING	陳穎欣	女	X		
3	CHAN YEE YAN	陳麗珍	女	X		
4	CHAN YIN YI	陳紅慈	女	X		
5	HOANG WING BEA	黃麗婷	女	X		
6	LAU JIN HOI	劉潔瑩	女	X		
7	LANE HOOR SHAM	林潔嫻	女	X		
8	LEUNG HEI KI	梁麗英	女	X		
9	LO HOI	盧海英	女	X		
10	LO YIM YIM	盧麗珊	女	X		
11	LUO SIU HEI	羅子嫻	女	X		
12	TRANG YIM YING	鄧麗珍	女	X		
13	FATSI HAN CHI	馮敏如	女	X		
14	WANG LOR YEE	黃麗潔	女	X		
15	WONG HUI TING	黃慧婷	女	X		
16	WONG YI HANG	黃耀豪	男	X		
17	YIP HO YING	葉麗英	女	X		
18	YIP HO YING	葉麗英	女	X		
19	YIP HO YING	葉麗英	女	X		
20	YIP HO YING	葉麗英	女	X		
21	YIP HO YING	葉麗英	女	X		
22	YIP HO YING	葉麗英	女	X		
23	YIP HO YING	葉麗英	女	X		
24	YIP HO YING	葉麗英	女	X		
25	YIP HO YING	葉麗英	女	X		
26	YIP HO YING	葉麗英	女	X		
27	YIP HO YING	葉麗英	女	X		
28	YIP HO YING	葉麗英	女	X		
29	YIP HO YING	葉麗英	女	X		
30	YIP HO YING	葉麗英	女	X		

Staff Development (Dec 14 Dec 2012)

Morning session: How classroom enhances self-directed learning and teaching effectiveness

Participants complete and return the questionnaire to us for future reference. Please blacken the circles and / or provide information in the space where appropriate.

1. Content on the workshop:

	Max	5	4	3	2	1	Min
(a) Overall, I was satisfied with this workshop.	0	0	0	0	0	0	0
(b) The subject(s) of the workshop was/were relevant.	0	0	0	0	0	0	0
(c) The content was relevant to the topic of the workshop.	0	0	0	0	0	0	0
(d) Overall, the speakers/facilitators were effective.	0	0	0	0	0	0	0
(e) The knowledge gained could be applied to my teaching.	0	0	0	0	0	0	0

2. What are the things you appreciate from the workshop? Anything you enjoy? Anything you find inspiring?

新檔案 28  
17-12-04 10:06

Aggregation List (2008/2009) - Sheet 4B - 2012/13

If an Education Pedagogical Scheme: How to use Tablet Computer Apps to Facilitate Learning and Teaching (Secondary School)

新檔案 27  
17-11-29 15:24

No.	English Name	Chinese Name	School Name	Birth Type	Sign-in	Sign Out
17	LO SHING MEI	盧靄英	SHING SHING CATHOLIC CHOI	SECONDARY	<i>Li</i>	
18	LIAI HOI BIN	呂凱屏	CANTON ST JOSEPH SEC BOU	SECONDARY	<i>Poly</i>	
19	LUNG CHEI KI	龍子強	SEC HUI CHH SECONDARY	SECONDARY	<i>Li</i>	
20	MAK HO YAN	麥浩添	SHAM DAVID YUWONG PO COLLEGE	SECONDARY	<i>Li</i>	
21	MAK LING	麥靜	CAMMEL DUNN CHANCE CONDITION SEC BOU	SECONDARY	<i>Li</i>	
22	MAK HANG TAO THOMAS	麥漢滔	HO FROG CHAMBER OF COMMERCE SEC BOU	SECONDARY	<i>Li</i>	
23	WU BIK FUN ANGEL	伍式芬	CANTON BROTHERS ASSOCIATION SEC SCHOOL	SECONDARY	<i>Li</i>	
24	WU WAI LING	吳慧玲	WONG WING TRULIE LIGHT COLLEGE	SECONDARY	<i>Li</i>	
25	FAL SIK KIN	馮麗賢	SHA TIN GOVERNMENT SECONDARY SCHOOL	SECONDARY	<i>Li</i>	
26	TAL YIN FAN	譚麗欣	NICHOLA BLOOMSBURY LEUNG CHOW WAI COLLEGE	SECONDARY	<i>Li</i>	
27	WONG HOI YIN	黃靄英	HO LUI SECONDARY SCHOOL	SECONDARY	<i>Li</i>	

rcise 4.2 (p.168)

quotient =  $2x^2 - x + 3$ , remainder = 0

quotient =  $3x - 2$ , remainder = -1

quotient =  $-3x - 4$ , remainder = -3

quotient =  $-x^2 + 2x - 3$ , remainder = 2

quotient =  $2x - 2$ , remainder = -1

quotient =  $4x - 6$ , remainder = -11

Aggregation List (2008/2009) - Sheet 4B - 2012/13

If an Education Pedagogical Scheme: How to use Tablet Computer Apps to Facilitate Learning and Teaching (Secondary School)

新檔案 26  
17-12-07 14:54

No.	English Name	Chinese Name	School Name	Birth Type	Sign-in	Sign Out
1	CHAM TSE YAT	陳子德	SEC HOI YAN COLLEGE	SECONDARY	<i>Li</i>	
2	CHAM WING YEE	陳錦儀	SEC HOI YAN SECONDARY SCHOOL	SECONDARY	<i>Li</i>	
3	CHAM YING YU	陳穎瑜	PUL CELINE HO YAN SECONDARY SCHOOL	SECONDARY	<i>Li</i>	

Week 14 Chapter 3

Section Quiz 5.2

1. The figure shows a right circular cone of base diameter 12 cm and height 14 cm. Express the volume of the cone in terms of  $x$ .

Base radius of the cone =  $(12 \div 2)$  cm = 6 cm (1M)

Volume of the cone =  $\frac{1}{3} \times 6 \times 6 \times 14$  cm<sup>3</sup> (1M)

新檔案 25  
17-12-04 10:06

Section Quiz 5.1

1. The figure shows a pyramid  $FABCD$  of height 9 cm. Its base is a square of side 5 cm. Find the volume of the pyramid. (2 marks)

Volume of the pyramid =  $\frac{1}{3} \times (5 \times 5) \times 9$  cm<sup>3</sup> (1M)

=  $75$  cm<sup>3</sup> (1M)

2. The figure shows a frustum  $ABCDEFGH$ . The upper base of the frustum is a rectangle of length 4 cm and width 3 cm. The lower base is a rectangle of length 6 cm and width 4 cm. The height of the frustum is 5 cm. Find the volume of the frustum. (2 marks)

Volume of the frustum =  $\frac{1}{3} \times (4 \times 3 + 6 \times 4 + \sqrt{4 \times 3 \times 6 \times 4}) \times 5$  (1M)

=  $75$  cm<sup>3</sup> (1M)

1  $y = a(x - h)^2 + k$

2  $a = 1$

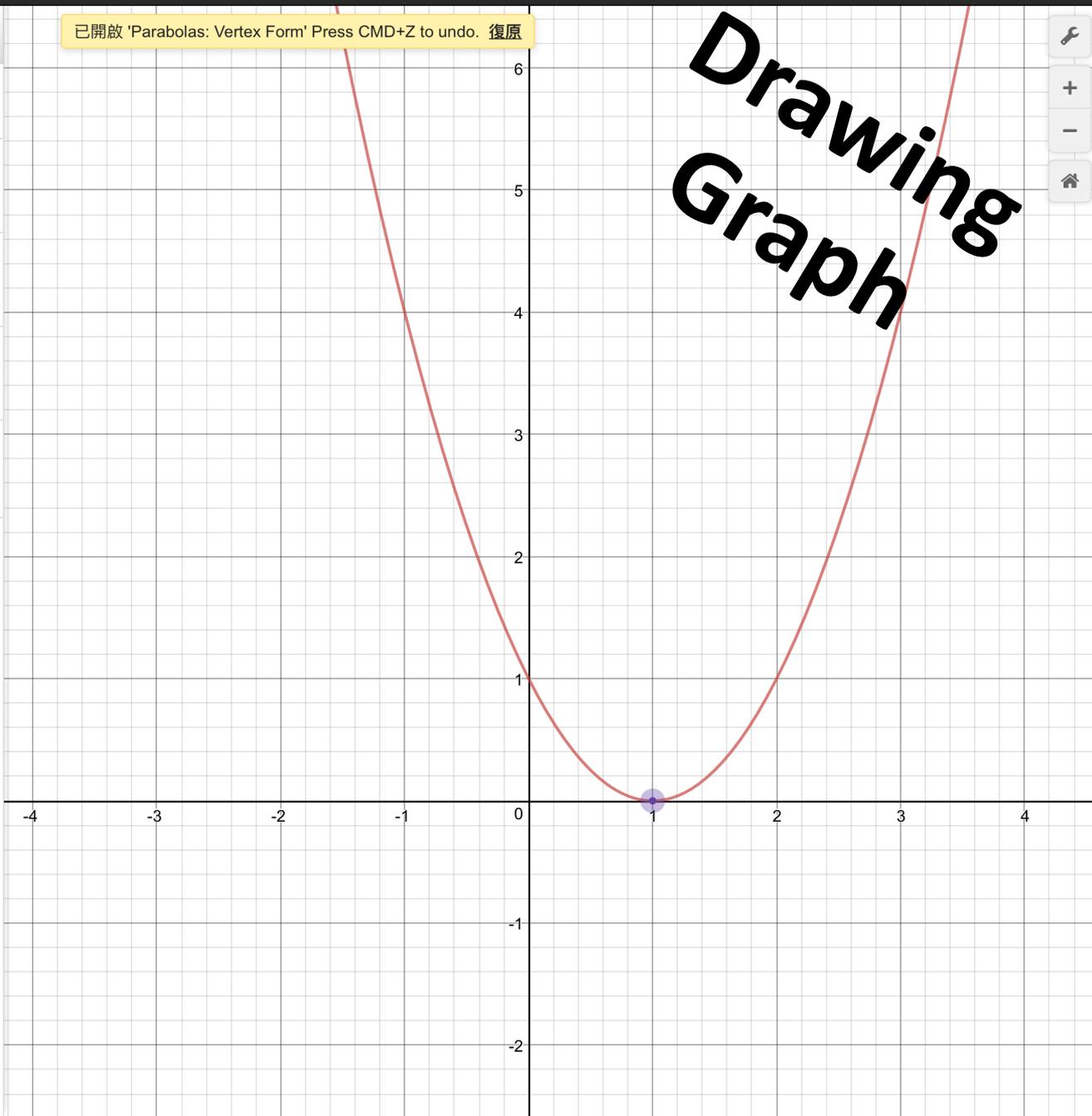
3  $h = 1$

4  $k = 0$

5  $(h, k)$

6  Label

已開啟 'Parabolas: Vertex Form' Press CMD+Z to undo. 復原



# Rotational Symmetry of Cube

Drag the red points on the top and the bottom of the cube to investigate its rotational symmetry.

Centres of Faces  Mid-points of Edges

Rotate the cube about the axis

0°

Demonstration that any cuboid can be split into three pyramids of any volume.

Cube  Split cuboid

Length  Width  Height

Rotate

Volume = 6.9  
Volume = 6.9  
Volume = 6.9

## 3D Nets

### Edward Knot

1. Cylinder and Prism

2. Pyramids and cones

3. Platonic Solids

Nets of 3d figures

Table of Contents

1. Cylinder and Prism
  1. Net of a Cube
  2. Nets of the Cube
  3. Net of Hexagonal Prism
  4. 11 Nets of the Cube
  5. Net of a Cylinder
  6. Net of a Cylinder
2. Pyramids and cones
  1. Rectangular Pyramid
  2. Net of a Square Pyramid
  3. Net of a Cone
  4. Net of a Cone
3. Platonic Solids
  1. Nets of Tetrahedron
  2. Net of an Octahedron
  3. Another Net of Dodecahedron
  4. Net of Dodecahedron
  5. Net of Icosahedron

Helpful Tools

GeoGebra

## Net of a Cone

1. Net of a Square Pyramid

2. Net of a Cone

3. Classic net of the cube

4. Triangular Prism Net

5. Net of a Cylinder

6. Net for a Rectangular Prism

7. Net of a Cone

$r = 3$

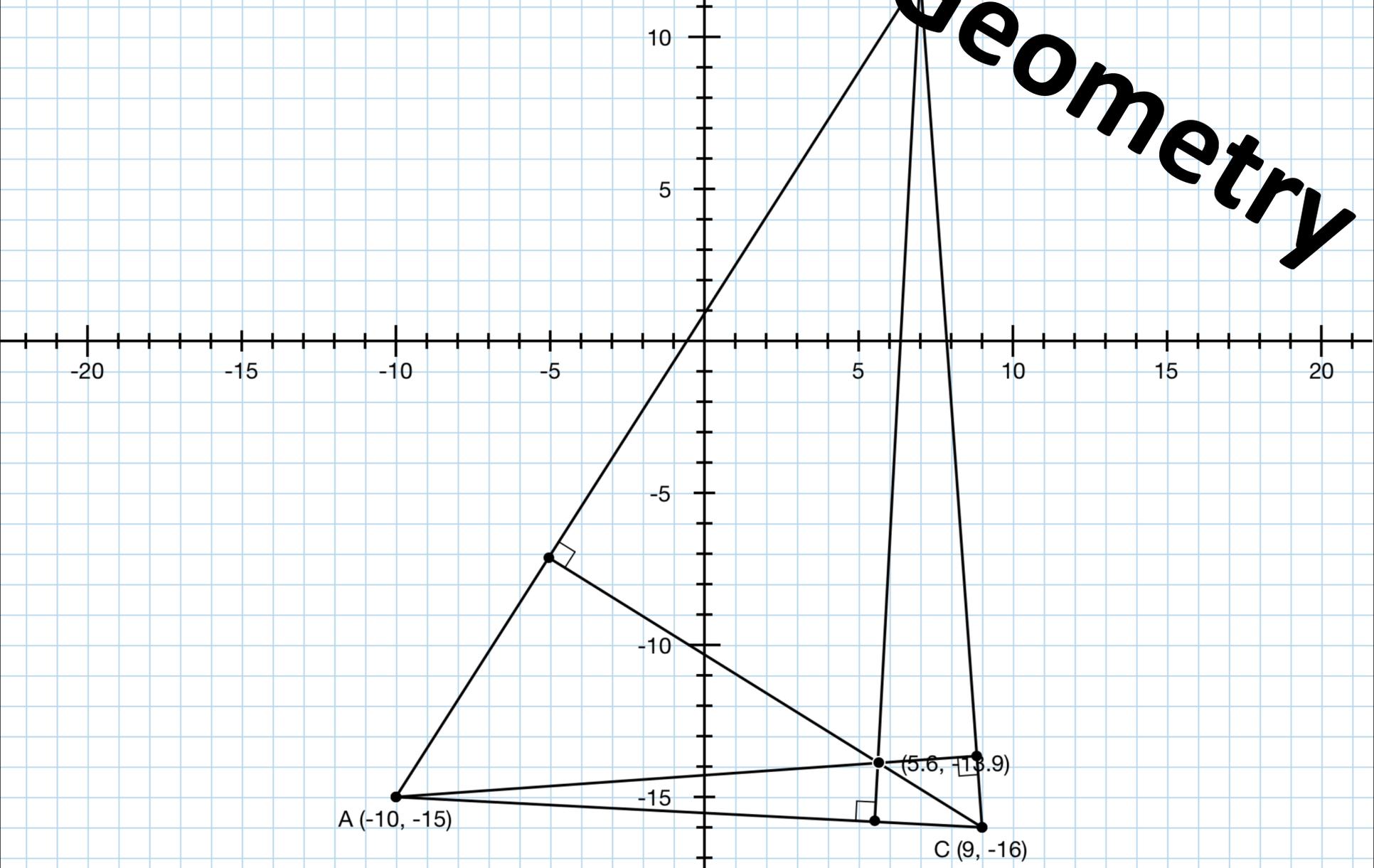
$h = 5.8$

Formula

Net

GeoGebra - GeoGebra Materials Team

# Geometry



Learning Assessment

test2  
by Yam Nam, William ttc...  
Oct 23, 2017 2 Mb

Inequality  
by Yam Nam, William ttc...  
Oct 23, 2017 1 Mb

Section Quiz 2.1  
by Yam Nam, William ttc...  
Jun 27, 2017 1 Mb

Symmetry and Tra...  
by Yam Nam, William ttc...  
Apr 2017 6 Mb

How To Plan and Rebuild A Highly Effective IT Infrastructure  
Unsaved  
test  
by Yam Nam, William ttc...  
Mar 30, 2017 3 Mb

新媒體素養教育  
核心課：網絡法義  
Unsaved  
網絡法義  
by benetwise MCC  
Feb 14, 2017 6 Mb

Ch.0 Basic Mathematics  
Short Quiz  
Unsaved  
Directed Number...  
by Yam Nam, William ttc...  
Jan 12, 2017 6 Mb

Unsaved  
Untitled Lesson  
by Yam Nam, William ttc...  
Jan 12, 2017 0 Mb

1. Complete the following table.  
1. Complete the following table.  
Draw It  
Percentage Revisi...  
by Yam Nam, William ttc...  
Mar 9, 2016 1 Mb

	Decimals	Percentage
(a)		19.2%
(b)	19/50	

What is the ratio of areas of the similar solids?  
Draw It  
Similar Solids  
by Yam Nam, William ttc...  
Dec 9, 2015 1 Mb

The 5th term and the 6th term of -2, -5, -8, -11, ... are:  
Draw It  
Sequence  
by Yam Nam, William ttc...  
Oct 14, 2015 0 Mb

New Trend Mathematics (Second Edition)  
Chapter 7  
More about Percentages  
S3B  
Unsaved  
S3 Chapter 7  
by Yam Nam, William ttc...  
Oct 5, 2015 2 Mb



1 of 6

 TEAM BLUE

Have Some  
Fun In The  
Lesson

Which of the following is smaller than  $-5.3$ ? Question 1

A.  $-5$

B.  $-5\frac{1}{4}$

C.  $-5\frac{1}{3}$

D.  $0$

 zoom

A

B

C

D

SUBMIT ANSWER



## 1718 4A Mathematics: 2017-2018 Academic Year

Tsung Tsin College

### All Materials

#### Chapter 1 Quadratic Equations in One Unknown (I)

Text Book Exercise Detail...

Teaching Videos

Notes and WorkSheets

Text Book PDF

#### Chapter 2 Quadratic Equations in One Unknown (II)

9/19/17 12:00a

E-Book

9/19/17 12:00a

Class Notes

9/19/17 12:00a

#### Chapter 3 Functions and Graphs

11/07/17 12:00a

E-book

ClassNotes

#### Chapter 5 Exponential and Logarithmic Functions

EBook

Teaching Videos

Find a place to  
store the learning  
resources

Upcoming



Materials

Updates

Gradebook

Attendance

Members

Choose Topic and Subtopic

Search Subtopics

Curriculum: HK Secondary S4-S5 Compul

Topic: Number and Algebra Review

Subtopic: Mixed questions on whole nu

Mixed questions on whole numbers

Questions

Outcomes

Create tabs

Print Preview

Evaluate  $2^5$ 

Consider 68 and 12.

Evaluate  $\frac{3^5}{3^2}$ .

Dave can mash 3 potatoes in 6 minutes.



Sophia is splitting a number of students into groups for a treasure hunt. She has 25 boys and 35 girls and doesn't want any boys or girls left out.



Mae can iron 2 shirts in 8 minutes and squeeze 10 oranges in 30 minutes.

Evaluate  $(-3)^4 \times (-5)^2$ Evaluate  $44 - 17$ Evaluate  $976 - 133$ Evaluate  $283 + 931$ Evaluate  $67 + 88$ **Self-directed Learning**



1 of 1

**Making  
Video**



Do You  
Know How  
Tall IFC Is?



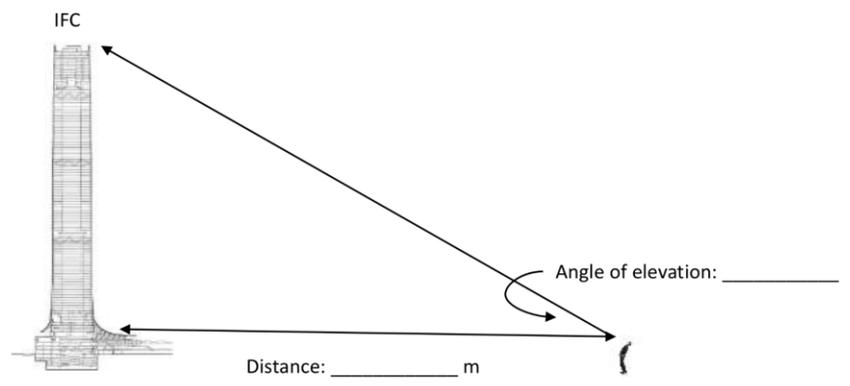
我的手電和尺

# Virtual Reality



### Angle of Elevation and Depression 仰角和俯角

#### A. Classroom Activity (Calculation the height of IFC):



1. Calculate the height of IFC. (Give your answer correct to nearest m)

2. What causes your calculation error?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

# *Mathematics* *Orienteering*



# ***EDB Centre of Excellence*** **教育局資訊科技卓越教學中心**



***Tsung Tsin College***  
**崇真書院**

