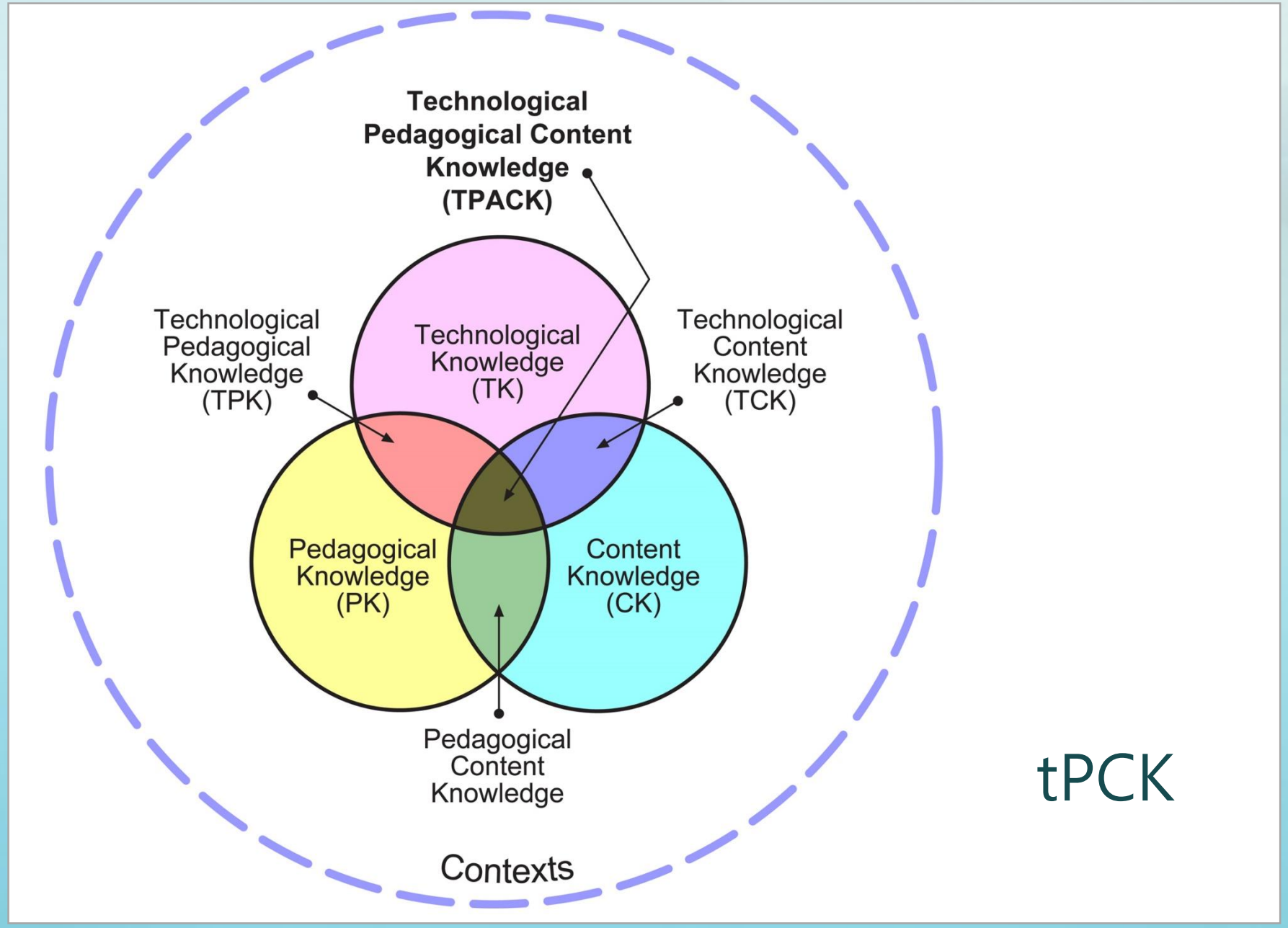
圓&圓周

ZOOM 備課會 2020/03/16

ZOOM 備課會

1. 教學進度、教材鋪排
2. 本學年的協作計劃
3. 線上/ZOOM教&學
4. e學習/自主學習/學習風格
5. 數學的學習/本質
6. 兩道數學題的討論


Technological Pedagogical Content Knowledge (TPACK)
Technological Pedagogical Knowledge (TPK)
Technological Knowledge (TK)
Technological Content Knowledge (TCK)
Pedagogical Knowledge (PK)
Content Knowledge (CK)
Pedagogical Content Knowledge
Contexts

tPCK

ZOOM教&學

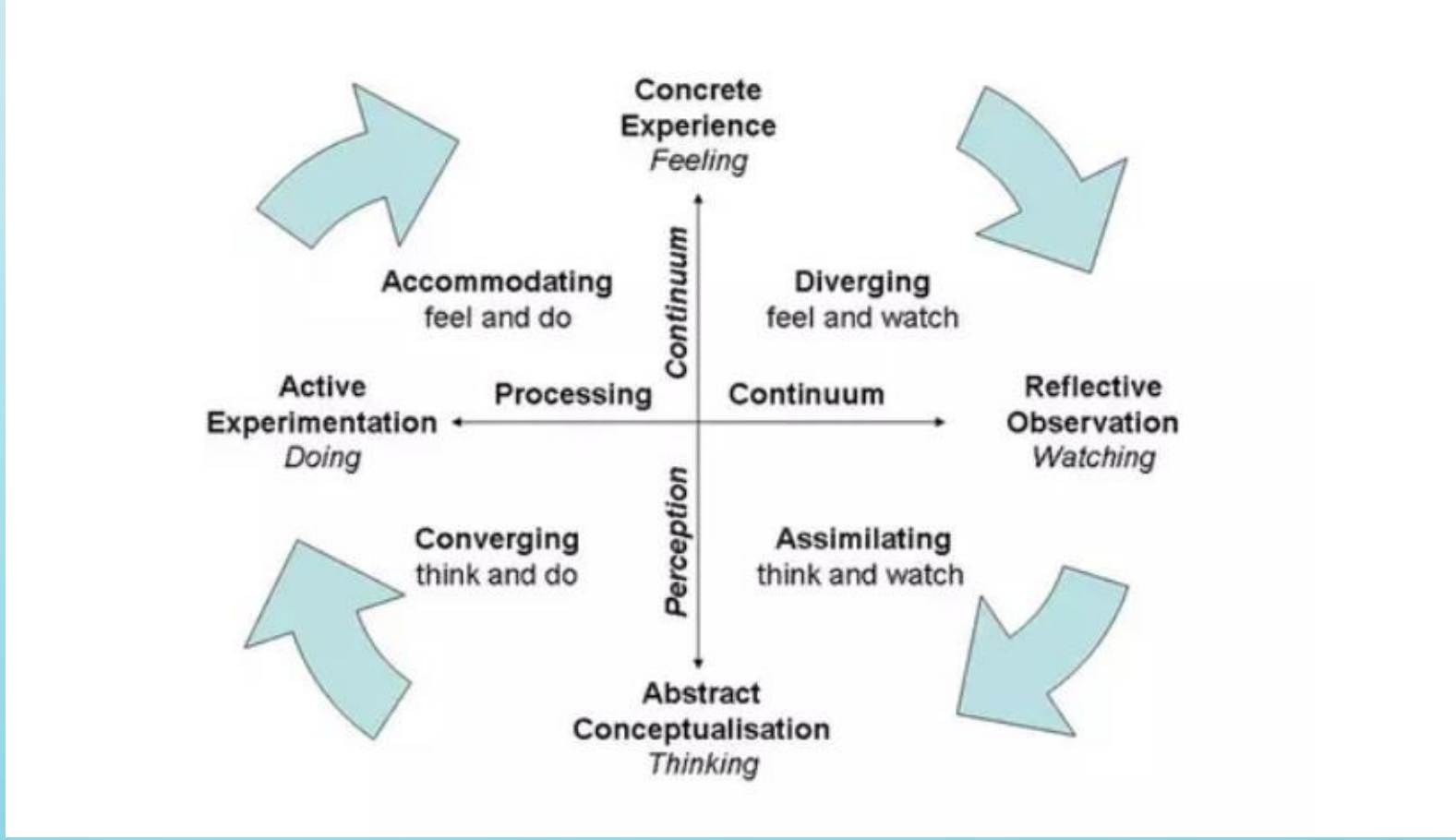
怎樣使用zoom進行線上教學?

ZOOM教&學

親子
科技提供學習彈性
維繫學生和老師的關係
但只能學習課程重點
不能取代校園上課
英華小學
陳美娟校長

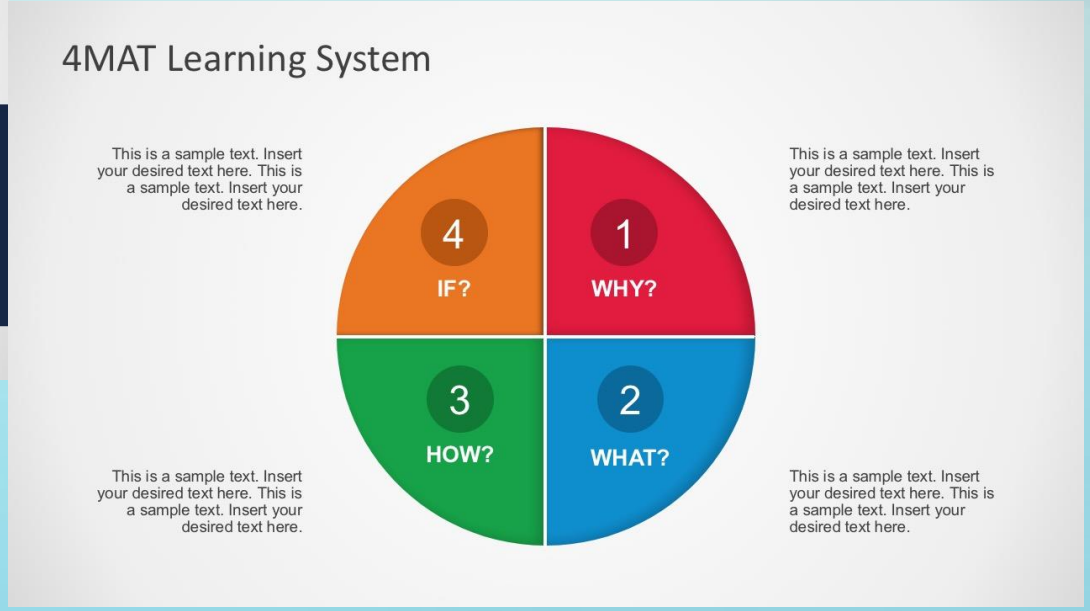
利用電子學習不停學
媽媽心得：
需要更
專注和自律
親子

David Kolb(1984)的學習風格簡介



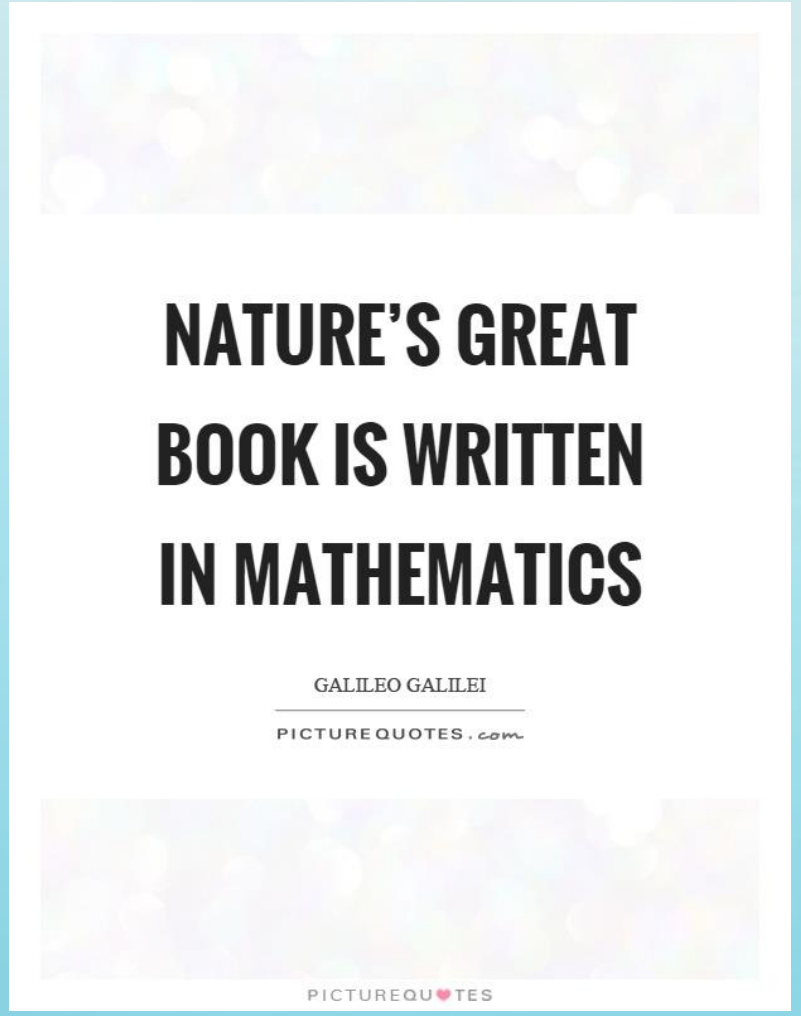
4MAT 學習風格簡介

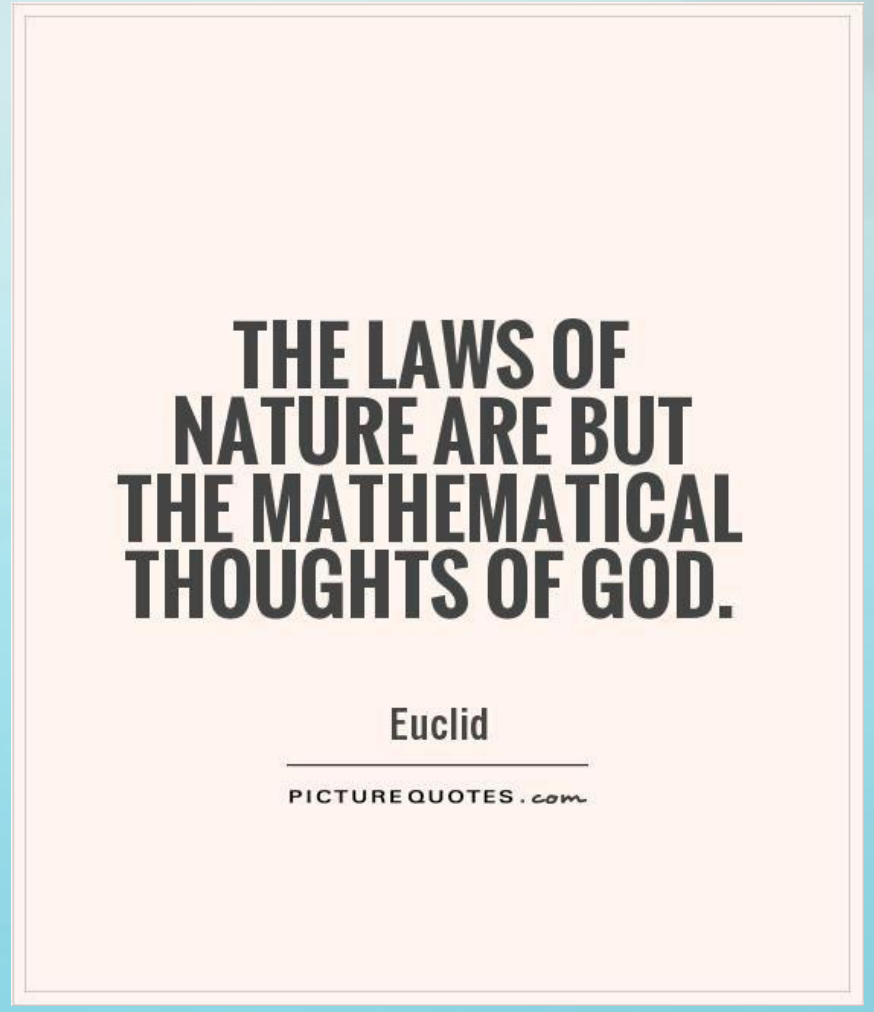
4MAT LEARNING SYSTEM
This is a sample text.
Insert your desired text here.
ADAPTATION
IF?
MEANING
WHY?
Perform
Connect
Refine
Attend
4
1
3
2
Extend
Imagine
Practice
Inform
HOW?
SKILLS
WHAT?
CONCEPTS


4MAT Learning System
This is a sample text. Insert your desired text here. This is a sample text. Insert your desired text here.
This is a sample text. Insert your desired text here. This is a sample text. Insert your desired text here.
4
IF?
1
WHY?
3
HOW?
2
WHAT?
This is a sample text. Insert your desired text here. This is a sample text. Insert your desired text here.
This is a sample text. Insert your desired text here. This is a sample text. Insert your desired text here.

爸媽+老師心底話及壓力分享：
網上課堂 = 互相折磨？

數學的本質


NATURE'S GREAT BOOK IS WRITTEN IN MATHEMATICS
GALILEO GALILEI
PICTUREQUOTES.com
PICTUREQUOTES


THE LAWS OF NATURE ARE BUT THE MATHEMATICAL THOUGHTS OF GOD.
Euclid
PICTUREQUOTES.com

34. Linda is x years old now. 5 years ago, Linda's age was $\frac{1}{3}$ of Alan's.

(a) How old was Alan 5 years ago? (Give the answer only and express the answer in terms of x) [2 marks]

5 years ago, Alan was $3(x-5)$ years old.

(b) If Alan was 18 years old 5 years ago, how old is Linda now? (Use equation to solve the problem and show your working) [4 marks]

$3(x-5)=18$
$x-5=6$
$x=11$
Linda is 11 years old now.

34. 嘉琳今年 x 歲。5 年前，嘉琳的年齡是小倫的 $\frac{1}{3}$。

(5 上 代數符號)

(a) 小倫 5 年前是多少歲？（只須寫出答案，答案以 x 表示） [2 分]

小倫 5 年前是 $3(x-5)$ 歲。

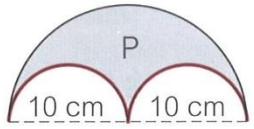
嘉琳 5 年前的年齡是 $(x-5)$ 歲。5 年前，嘉琳的年齡是小倫的 $\frac{1}{3}$，即小倫 5 年前是 $3(x-5)$ 歲。

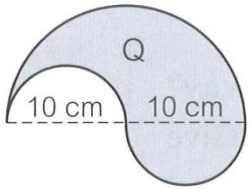
(6 下 解方程)

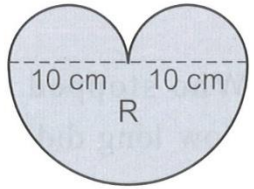
(b) 如果 5 年前，小倫是 18 歲，嘉琳今年多少歲？（須用方程列式計算） [4 分]

$3(x-5)=18$
$x-5=6$
$x=11$
嘉琳今年 11 歲。

不用方程計算，不給分。欠文字解說、單位錯漏或計算過程表達欠佳，扣 1 分。







2 個小圓的曲線部分合併後剛好是一個直徑為 10 cm 的圓。

35. (a) What is the perimeter of Figure P? (Give the answer only and take π as 3.14)

The perimeter of Figure P is 62.8 cm.

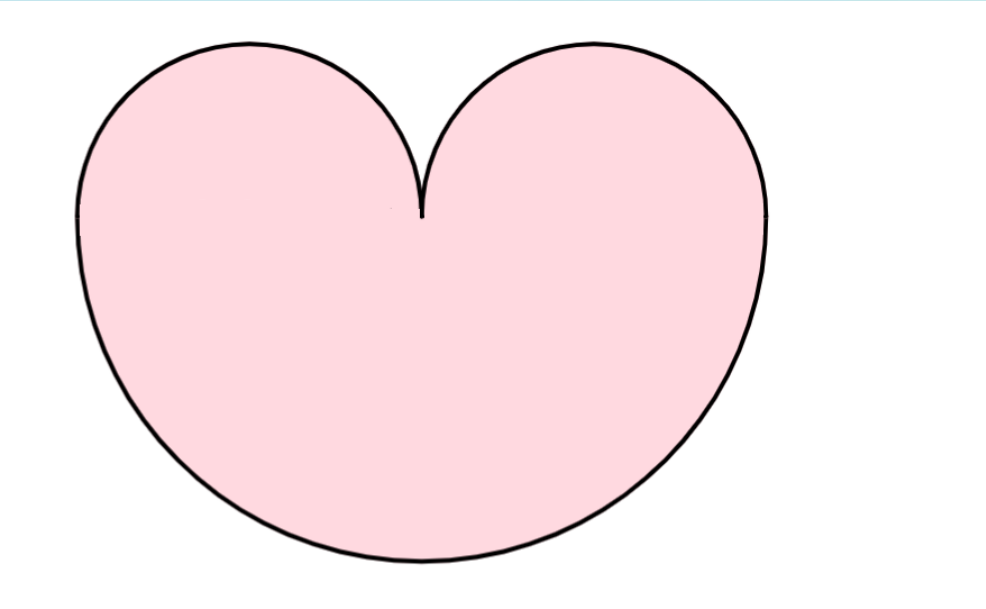
(6 下 圓周的計算)

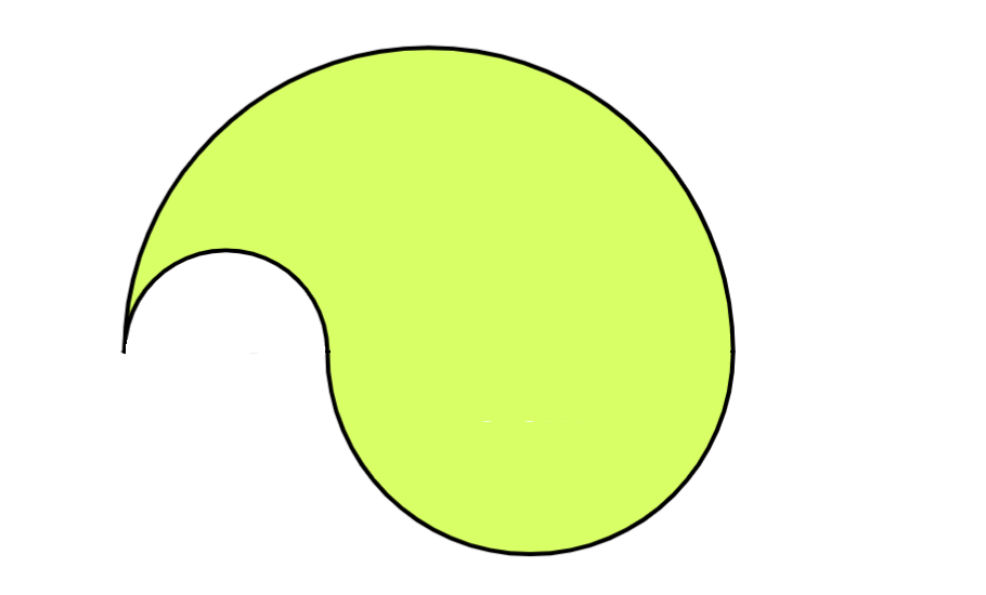
35. (a) 圖形 P 的周界是多少？（只須寫出答案，取 π 為 3.14） [2 分]

圖形 P 的周界是 62.8 cm。

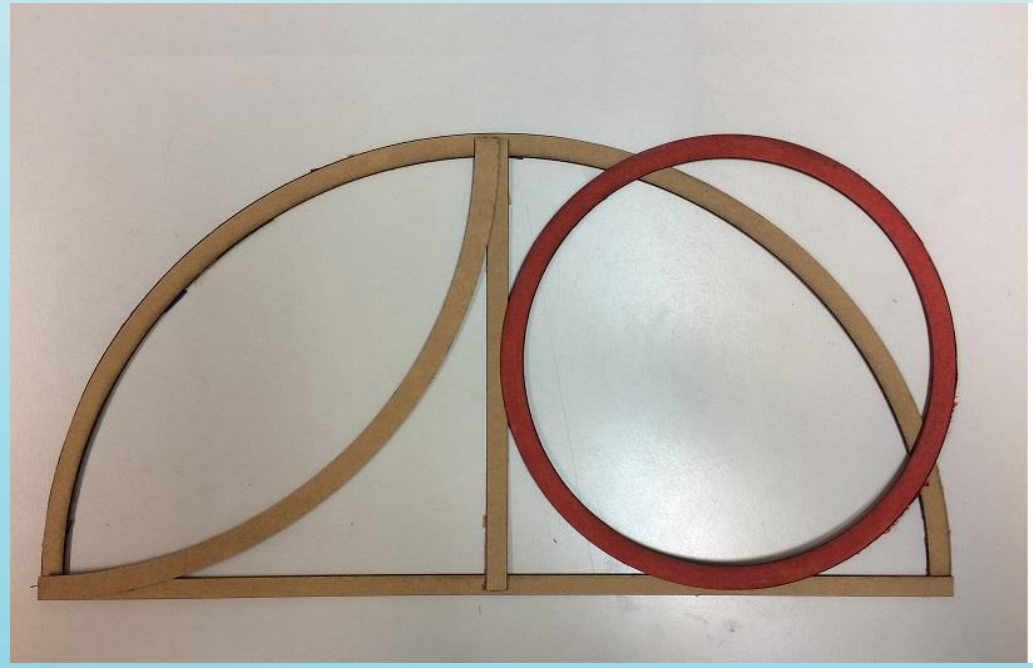
PreS1模擬試題

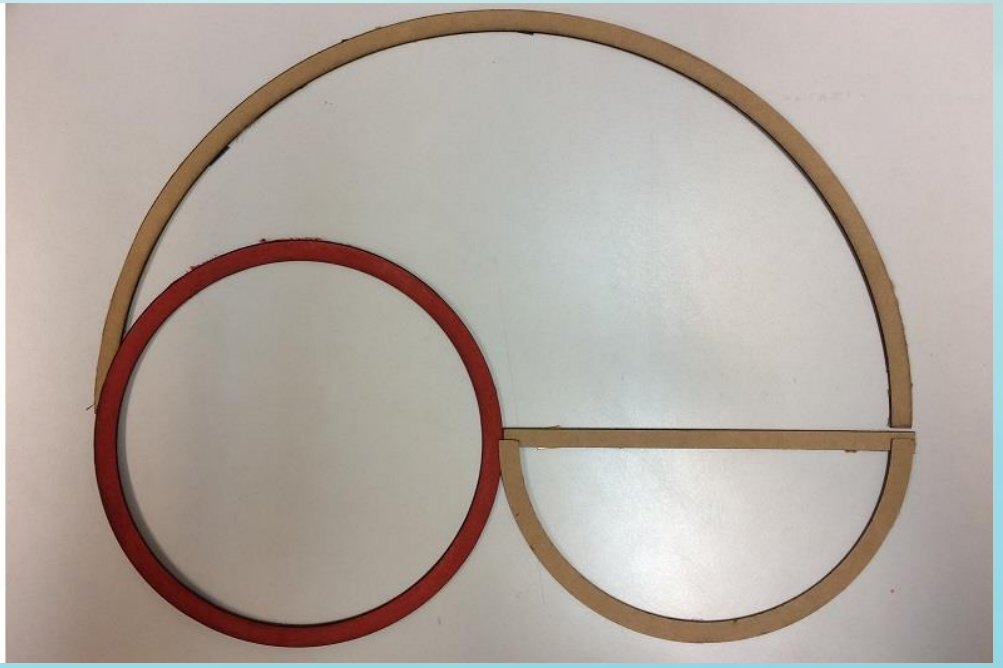
周界問題 1



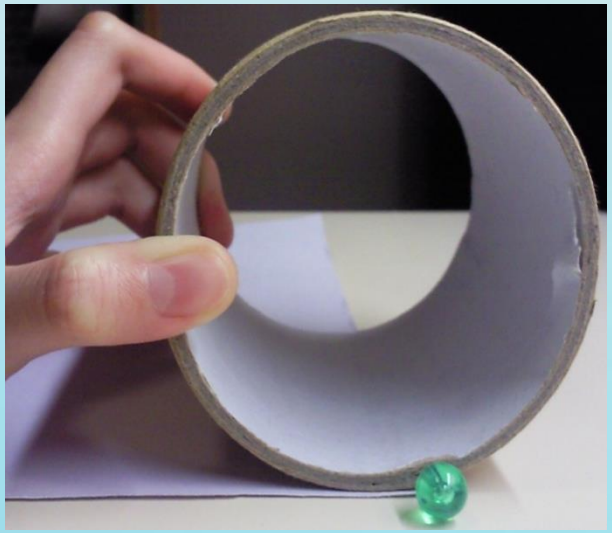


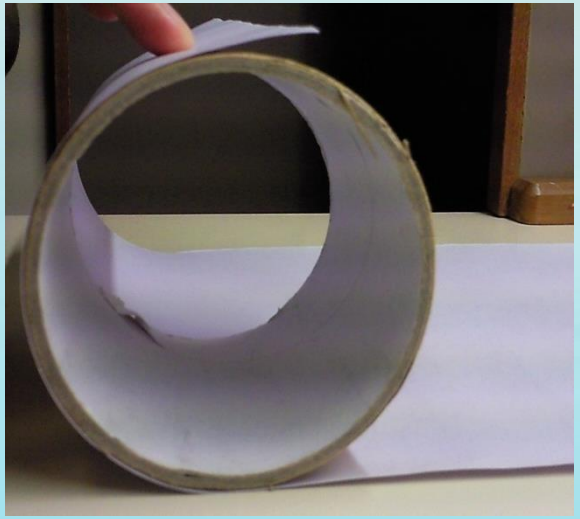
圓內有圓



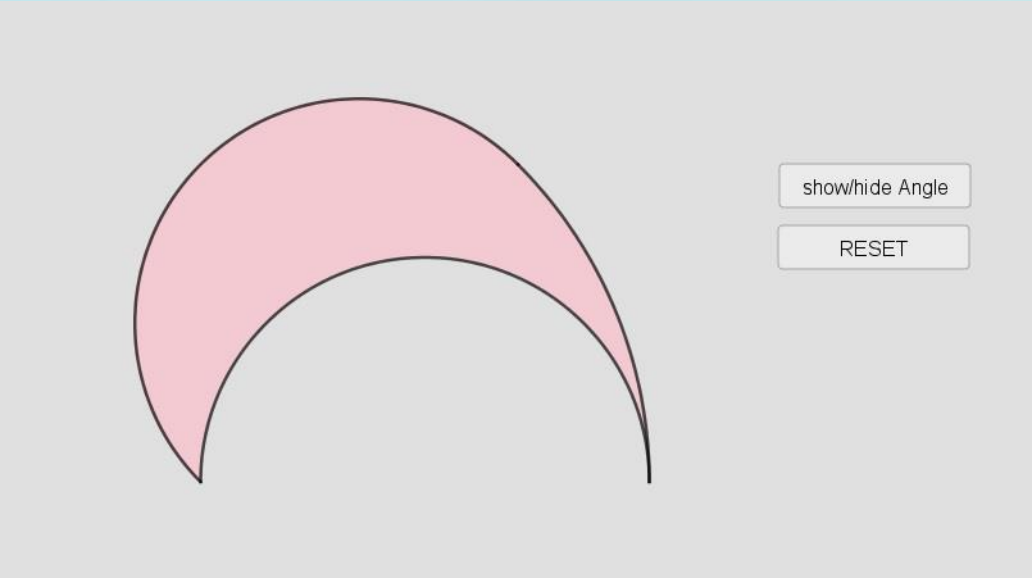


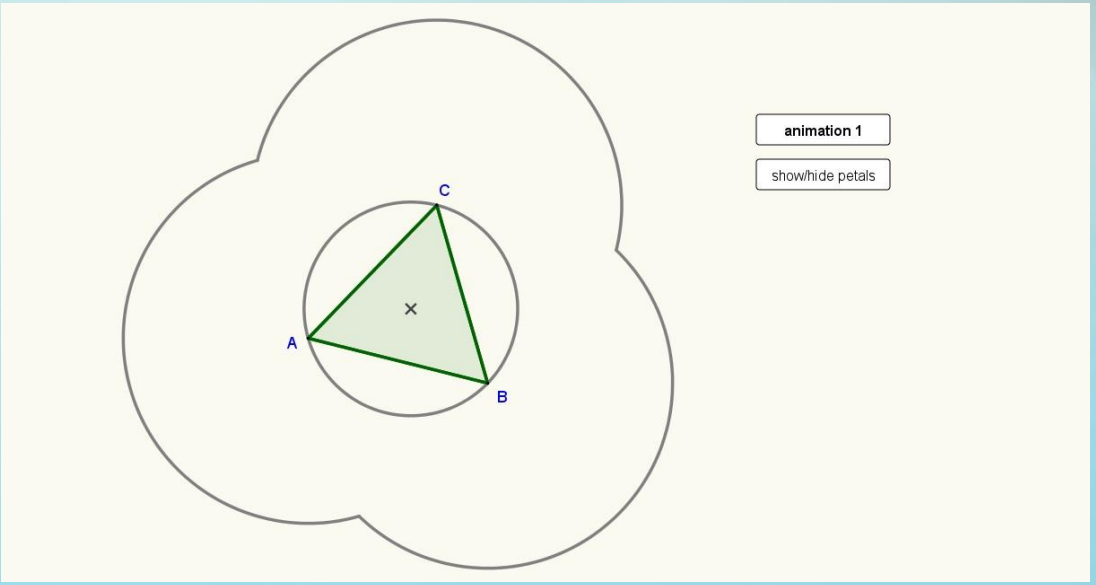
等周





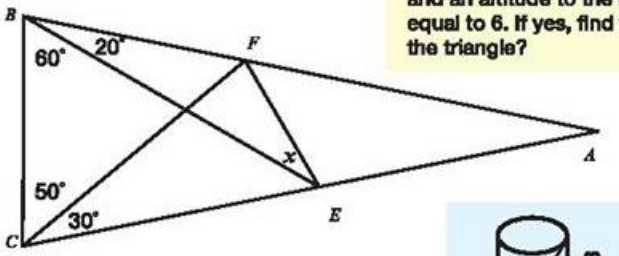
周界問題 2





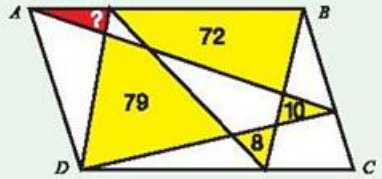
QUIZ

1 Solve for x.



2 Can we construct a right triangle which has a hypotenuse equal to 10 and an altitude to the hypotenuse equal to 6. If yes, find the area of the triangle?

3 Find area of *red part*.



4

Find the length of spiral wire.

CIRCUMFERENCE= 4

5 What are the distinct possible values of A, B and C ?

$$\begin{array}{r} AAA \\ BBB \\ +CCC \\ \hline BAAC \end{array}$$

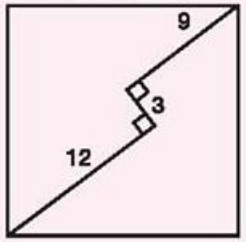
6

What is the area of the shaded region?

7 Solve for x

$$x=\sqrt{1+2\sqrt{1+3\sqrt{1+4\sqrt{1+\ldots}}}}$$

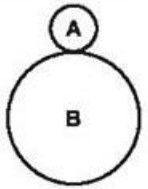
8 Find the side of square.



9

$$\begin{array}{r} *53 \\ **9\overline{)6*8***} \\ ***2 \\ \hline *9** \\ **4* \\ \hline **4* \\ **** \end{array}$$

10 The radius of circle A is 1/3 the radius of circle B. Circle A rolls around circle B one trip back to its starting point. How many times will circle A revolve in total?



1. 30°; 2. Cant find; 3. 9; 4. 5; 5. A9, B1, C 8; 6. 1006.8; 7. 3; 8. 15; 9. 638997, 749, 853; 10. 4

解難？難解？

趣味？枯燥？

To teach effectively a teacher must develop a feeling for his subject; he cannot make his students sense its vitality if he does not sense it himself. He cannot share his enthusiasm when he has no enthusiasm to share. How he makes his point may be as important as the point he makes; he must personally feel it to be important.

George Polya
— Mathematical Discovery, New York, 1981