

ຄະຕຕາກຕົກ

ຫັນມ້ອງມາດີກມາປີທີ່

ກາຈຕັດກວາຍ



ແລະ
ຮ່າງຄະຫຼວງເຄຣະນີ

ເຮົາຄສົມວິເຄຣະນີ

ຸດແບ່ງກາໄນ

- ຖື່ນແບ່ງກາໄນ
- ຖື່ນກຶ່ງກລາງ
- ຖື່ນຕົວອອນເສັ້ນມູ້ຂອງນີ້ *centroid*

ຮະບະທາງຮະຫວ່າງຸດກັບຸດ

- ຮະບະທາງຮະຫວ່າງຸດກັບຸດ

ເສັ້ນຕົວ

- ຄວາມຊັ້ນເສັ້ນຕົວ
- ສໍາການເສັ້ນຕົວ

ຄວາມສໍາພັນຮັບຮະຫວ່າງເສັ້ນຕົວ

- ເສັ້ນຕົວທີ່ໃຫຍ່ກັນ
- ເສັ້ນຕົວທີ່ຕິ່ງຈາກກັນ

ຮະບະທາງຮະຫວ່າງ...

ຮະបະທາງຮະអວំងទុកកប់សេនពេរស និងសេនពេរសកប់សេនពេរស

- ຮະបະທາງຮະអວំងទុកកប់សេនពេរស
- ຮະបະທາງຮະអວំងសេនពេរសកប់សេនពេរស

អូមរោងសេនពេរស

- អូមរោងសេនពេរស

ជម្រាវសេនពេរសដែលបង្កើតឡើង និងសេនពេរស

- ជម្រាវសេនពេរសដែលបង្កើតឡើងអូម
រោងសេនពេរស

ກາຄົດກາຮຸ

ໜຶກຂາ

- ໜຶກຂາ

ພາຣາໄປລາ

- ພາຣາໄປລາ

ໜຶ່ງ

- ແຈ້ງ

ໄສເພອະໄປລາ

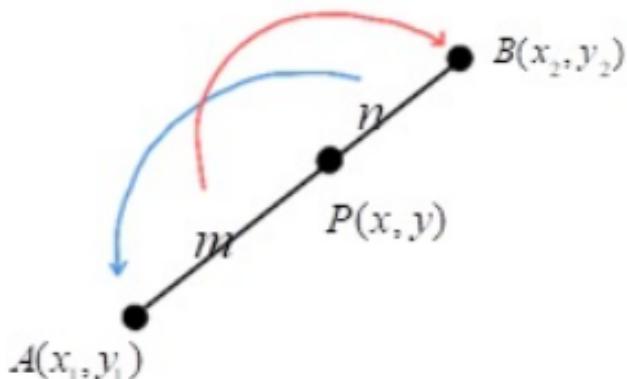
- ໄສເພອະໄປລາ

ຮຽນຄະດີຕົວເຄຣະໜ້າ

1

ຈຸດແບ່ນກາ້ໄນ

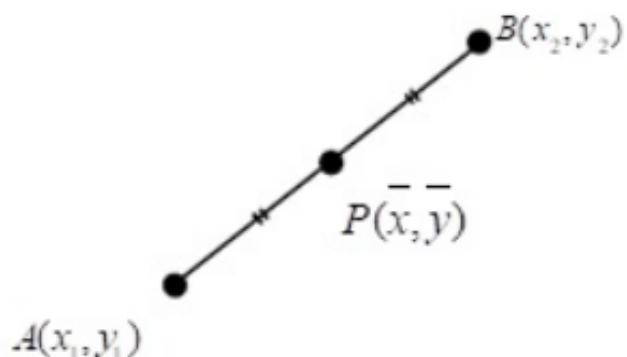
- ຈຸດແບ່ນກາ້ໄນ



$$x = \frac{nx_1 + mx_2}{n+m}$$

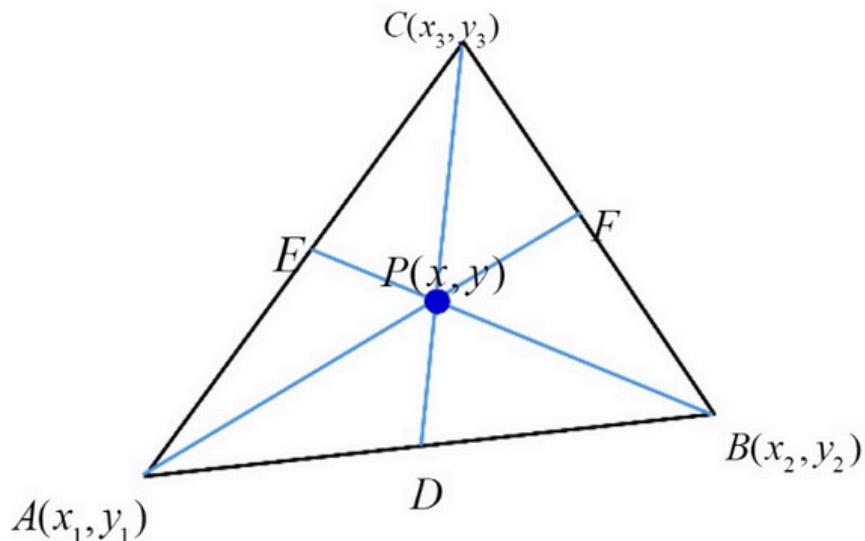
$$y = \frac{ny_1 + my_2}{n+m}$$

- ຈຸດກົໍສົກລາຍ



$$P(\bar{x}, \bar{y}) = \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}$$

- គុណព័ត៌មានលេខវិទ្យាឯកសារ centroid

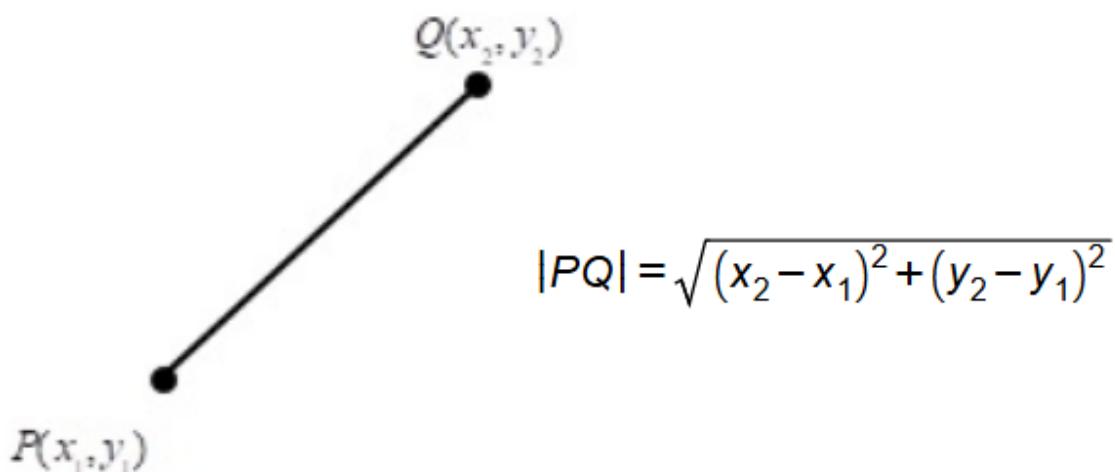


$$x = \frac{x_1 + x_2 + x_3}{3} \quad | \quad y = \frac{y_1 + y_2 + y_3}{3}$$

2

របៀបគោរពរវាងគុណព័ត៌មាន

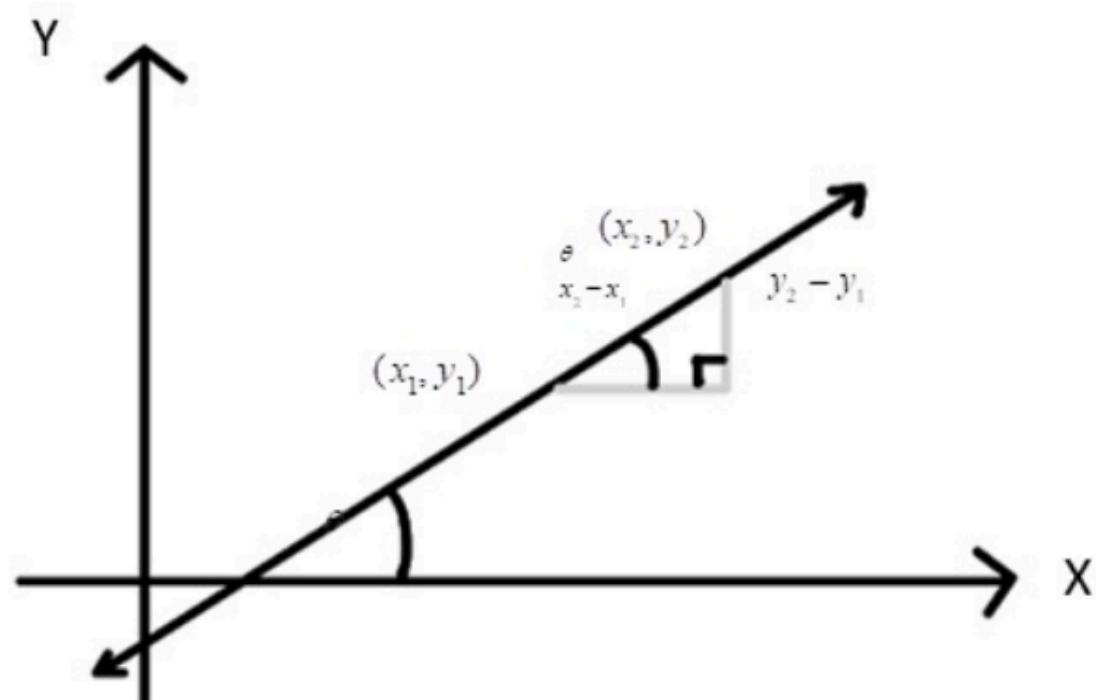
- របៀបគោរពរវាងគុណព័ត៌មាន



3

ເສັ້ນຕົວ

- ດາວກຫັນເສັ້ນຕົວ



$$m = \frac{y_2 - y_1}{x_2 - x_1} \text{ ມີຄະດີ } m = \tan \theta = -\frac{A}{B}$$

- ລົມການເສັ້ນຕົວ

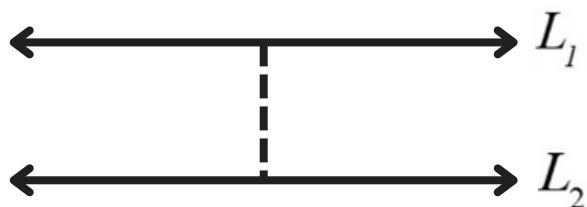
$$y - y_1 = m(x - x_1)$$

$$Ax + By + C = 0$$

๔

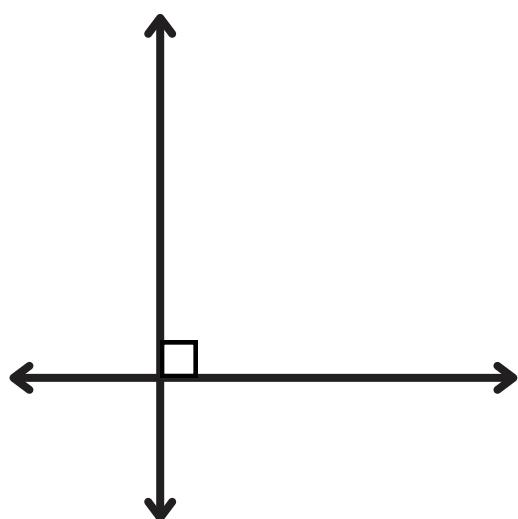
ความสัมพันธ์ระหว่างเส้นตรง

- เส้นตรงที่นานกัน



$$L_1 \parallel L_2 \leftrightarrow m_1 = m_2$$

- เส้นตรงที่ตั้งฉากกัน



$$L_1 \perp L_2 \leftrightarrow m_1 \cdot m_2 = -1 \text{ หรือ } m_{L_1} = 0 \text{ และ } m_{L_2} \text{ หากค่าไม่ได้}$$

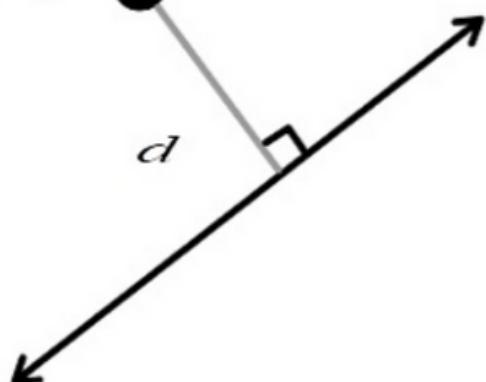
5

របៀបទានរបៀបអវេងទុកបែនពេល និងលេខពេលកំណត់ទុកបែនពេល

- របៀបទានរបៀបអវេងទុកបែនពេល

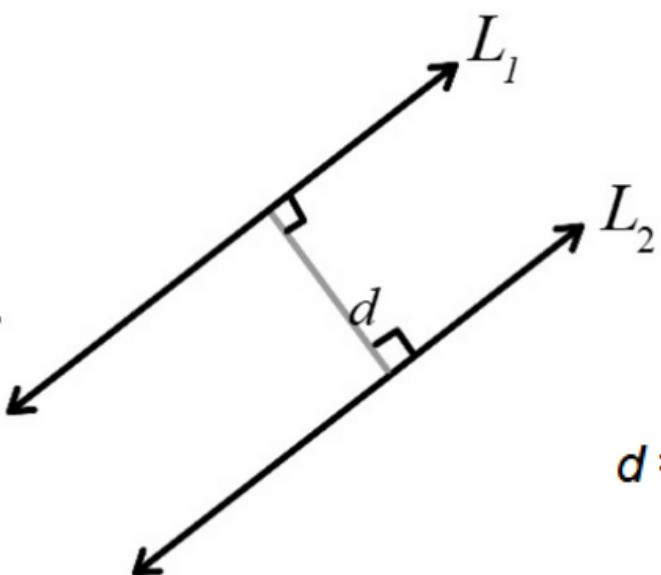
(x_1, y_1)

$$Ax + By + C = 0$$



$$d = \frac{|Ax_1 + By_1 + C|}{\sqrt{A^2 + B^2}}$$

- របៀបទានរបៀបអវេងលេខពេលកំណត់ទុកបែនពេល

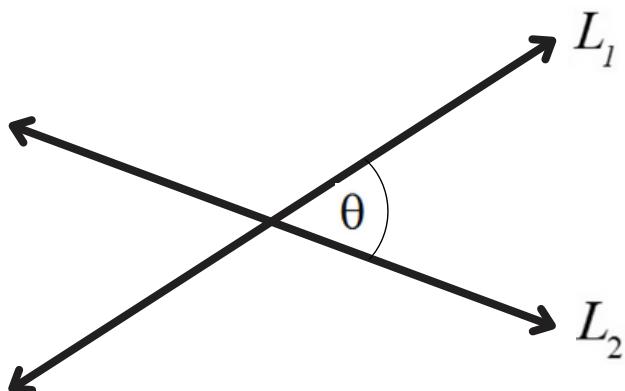
 L_1 L_2 

$$d = \frac{|C_1 - C_2|}{\sqrt{A^2 + B^2}}$$

6

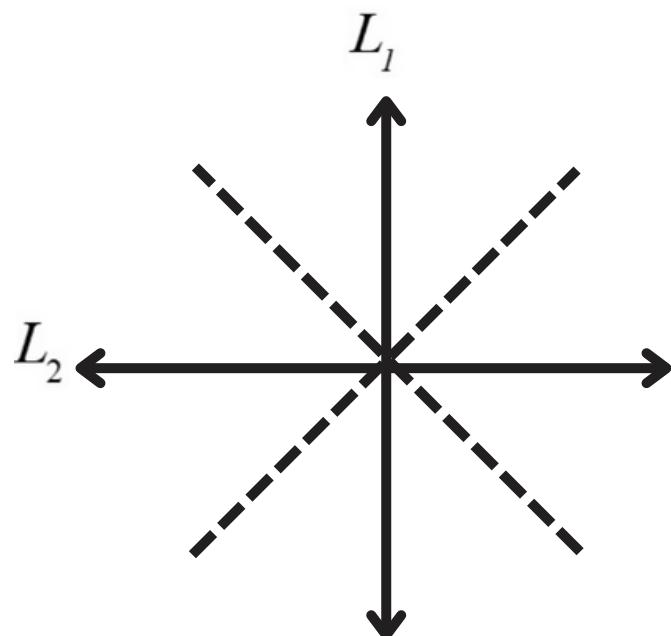
អូបរេអវ៉ាស់សែនចរស

- អូបរេអវ៉ាស់សែនចរស



$$\tan \theta = \left| \frac{m_1 - m_2}{1 + m_1 m_2} \right|$$

- ភម្លាករសែនចរសពីរបៃងក្រែងអុយ



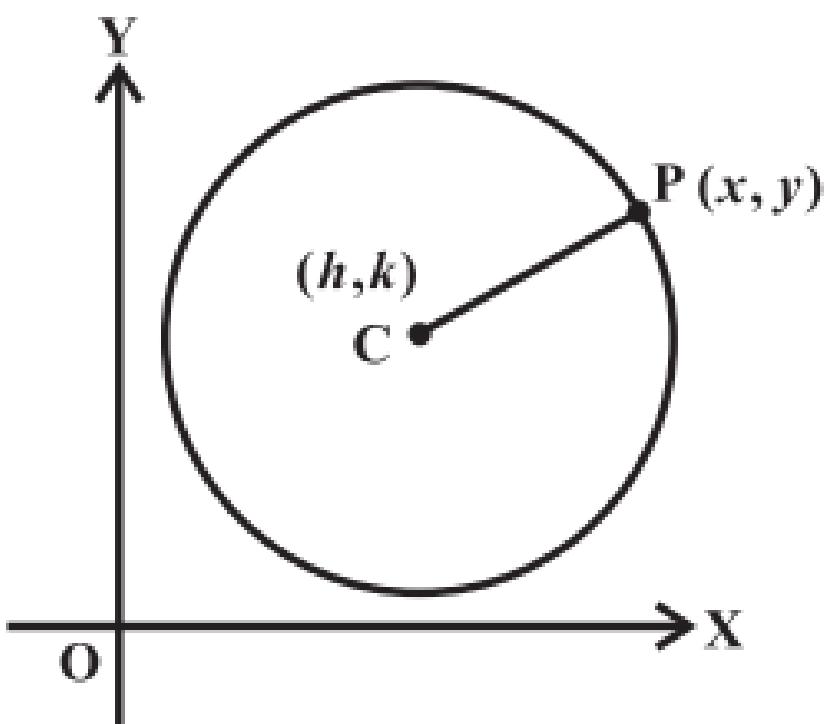
$$\frac{|Ax_1 + By_1 + C|}{\sqrt{A^2 + B^2}} = \frac{|Ax_2 + By_2 + C|}{\sqrt{A^2 + B^2}}$$

ការចំណាំ

1

គេហទ័រ

- គេហទ័រ



$$x^2 + y^2 = r^2$$

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

$$x^2 + y^2 + Dx + Ey + F = 0$$

$$(h, k) = \left(-\frac{D}{2}, -\frac{E}{2} \right)$$

$$r = \frac{\sqrt{D^2 + E^2 - 4F}}{2}$$



ແບບປະເທິນຄວາມຖິ່ນພອໃຈຕ່ອ
short gun