# 선분의 내분점과 외분점
(The internal division and the external divison of a line segment)

# The internal division and the external divison of a line segment

Start End

# The internal division and the external divison of a line segment

Start End

# The internal division and the external divison of a line segment

Start End

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$$\overline{AP} : \overline{BP} = 3 : 2$$

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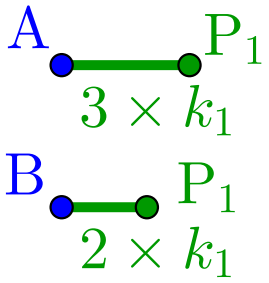


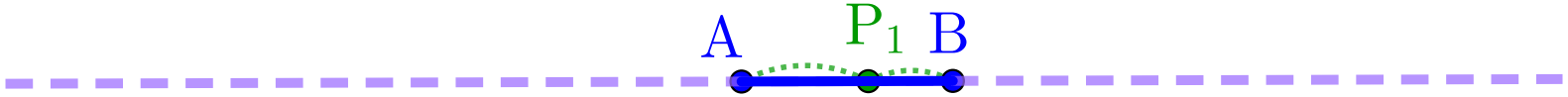

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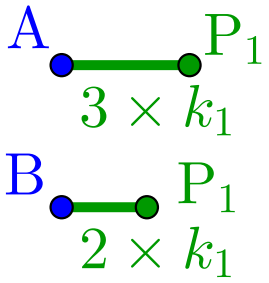


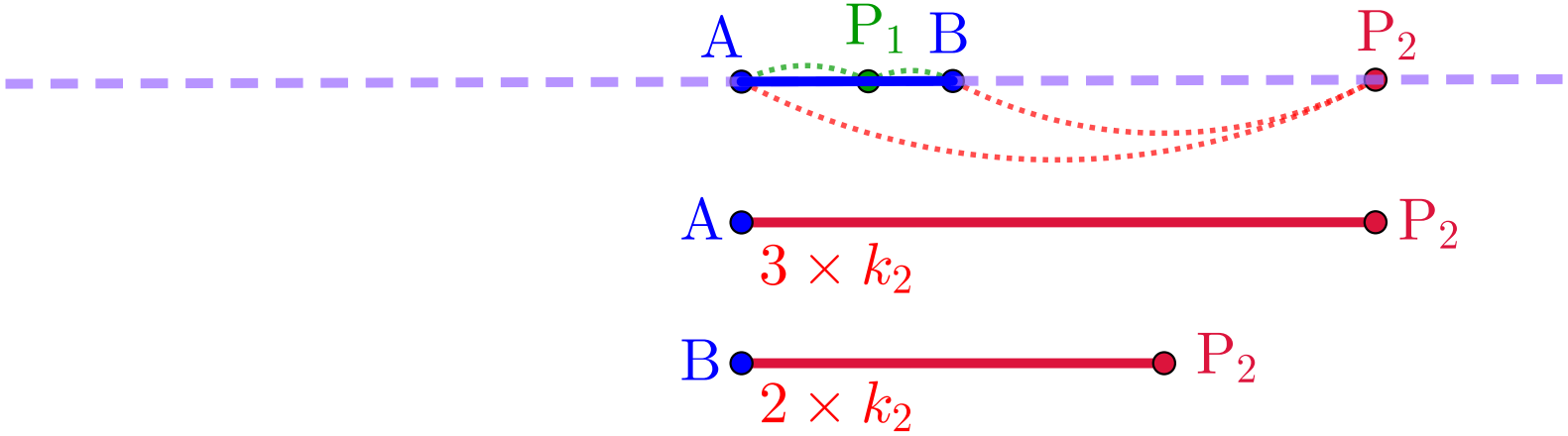

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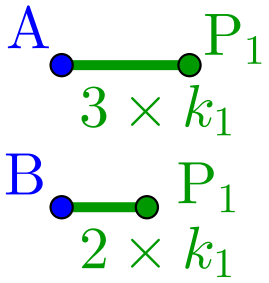
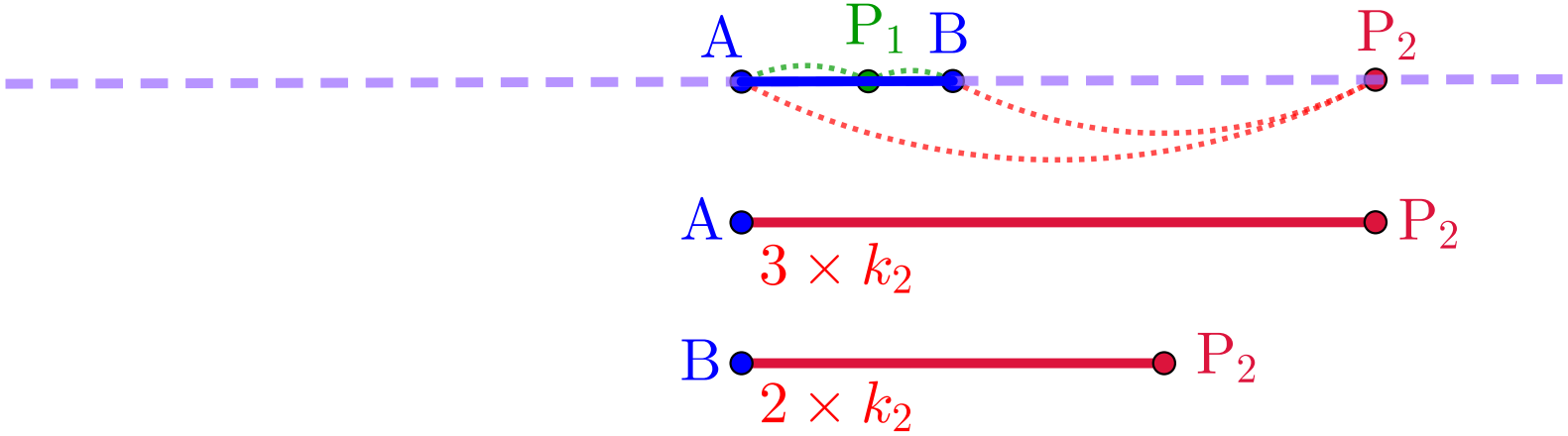



**Internal Divison**



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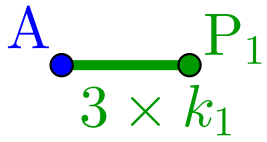


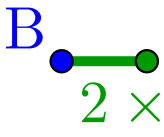


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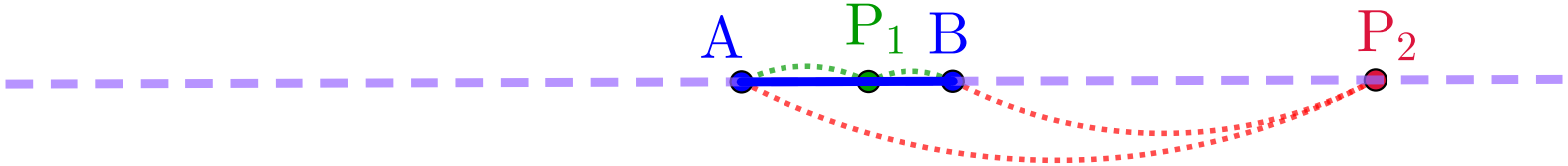




**External Division**

$$\overline{AP} : \overline{BP} = 1 : 1$$

**Internal Divison**


**External Division**

Start End

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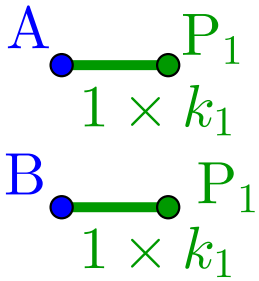


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**External Division**

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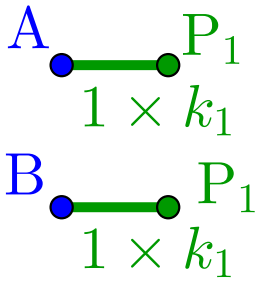


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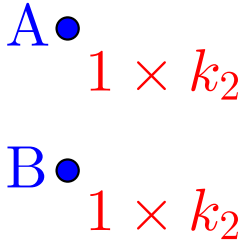


**External Division**

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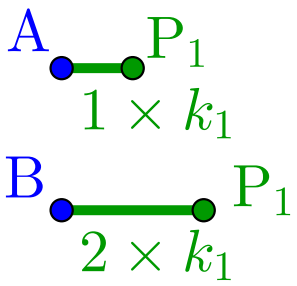


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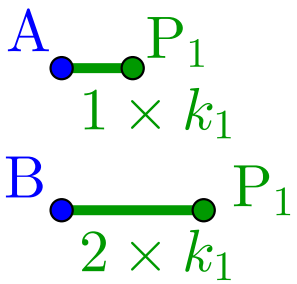


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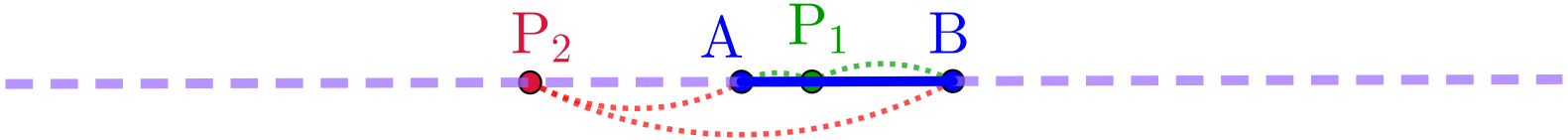


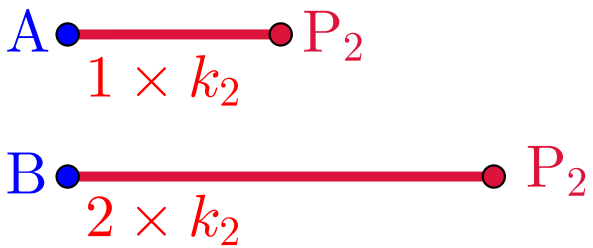


**External Division**

$$\overline{AP} : \overline{BP} = 1 : 3$$

**Internal Divison**


**External Division**

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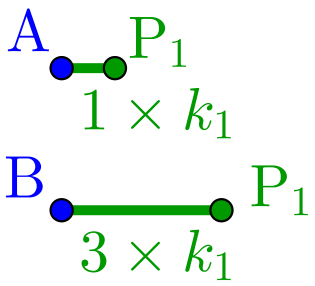


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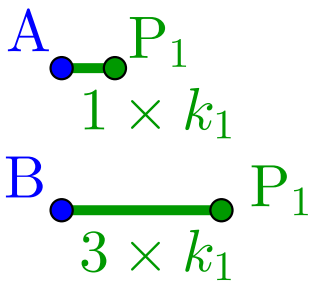
$$\overline{AP} : \overline{BP} = 1 : 3$$

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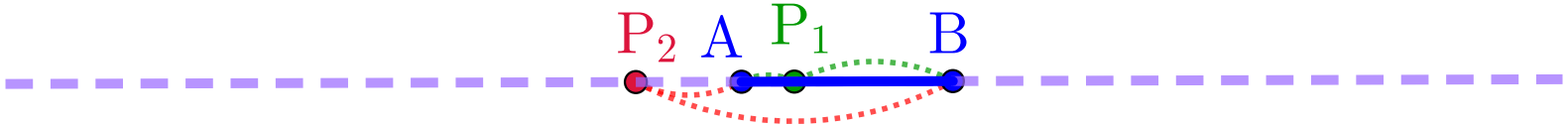
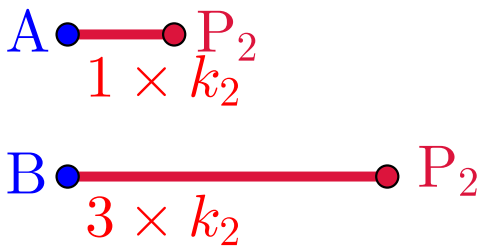



**External Division**

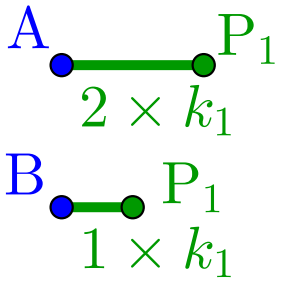
$$\overline{AP} : \overline{BP} = 2 : 1$$

**Internal Divison**

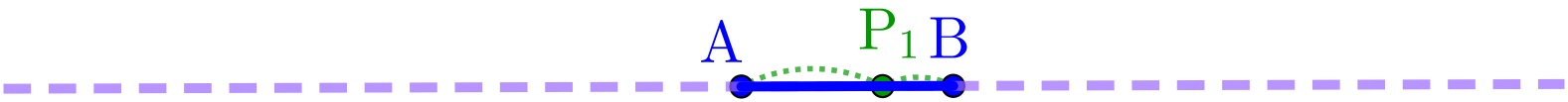

**External Division**

Start End

$$\overline{AP} : \overline{BP} = 2 : 1$$

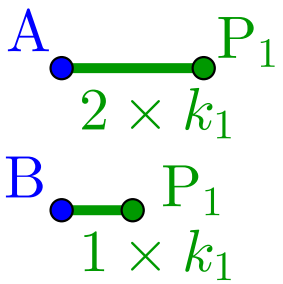



**Internal Divison**

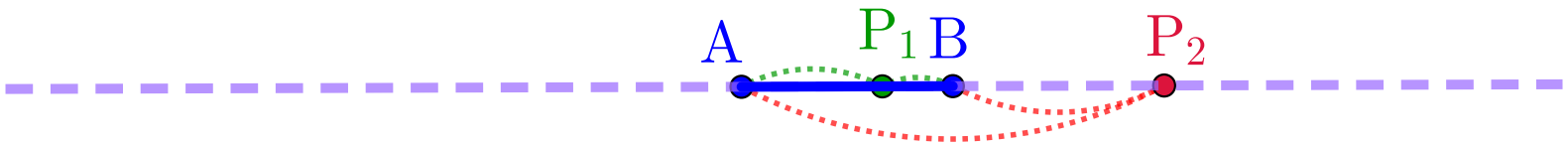


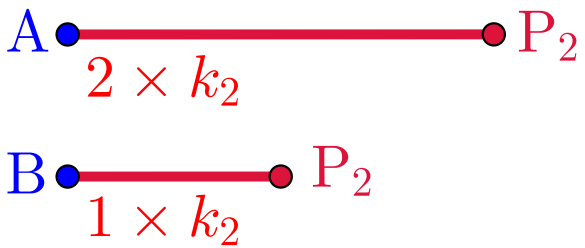

**External Division**

$$\overline{AP} : \overline{BP} = 2 : 1$$




**Internal Divison**




**External Division**

$$\overline{AP} : \overline{BP} = 2 : 2$$

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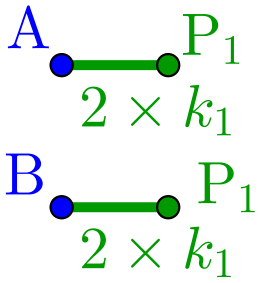


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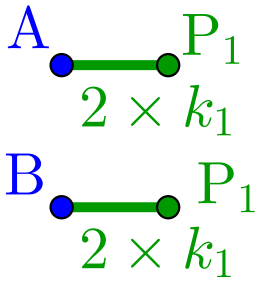


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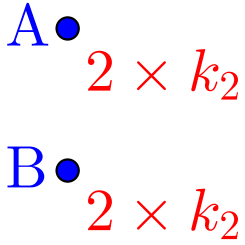


**External Division**

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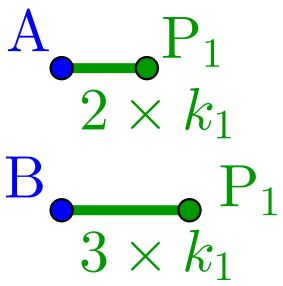


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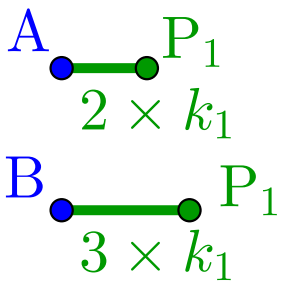


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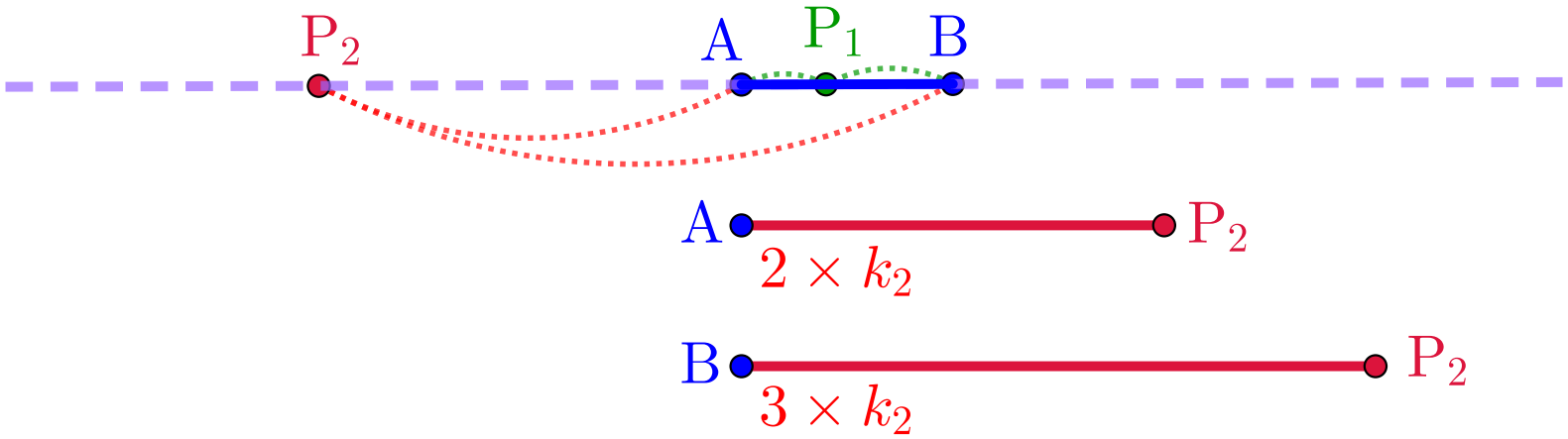



**External Division**

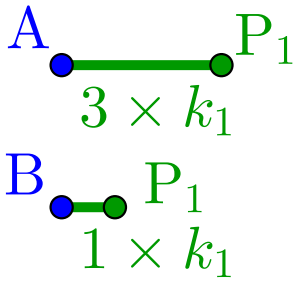
$$\overline{AP} : \overline{BP} = 3 : 1$$

**Internal Divison**

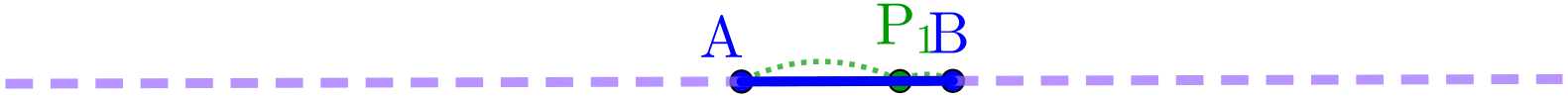

**External Division**

Start End

$$\overline{AP} : \overline{BP} = 3 : 1$$




**Internal Divison**




**External Division**

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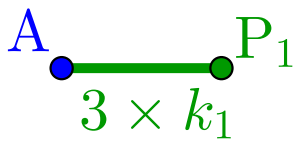


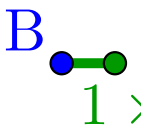


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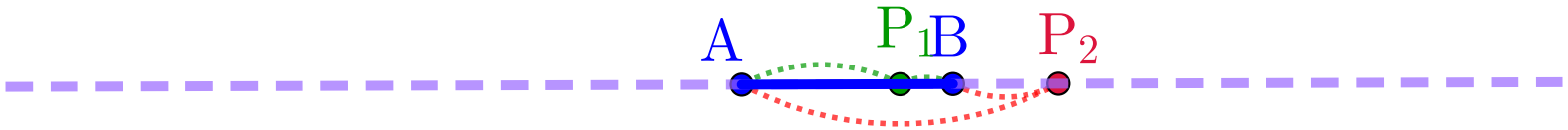



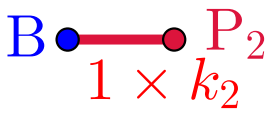


**External Division**

$$\overline{AP} : \overline{BP} = 3 : 2$$

**Internal Divison**


**External Division**

Start End

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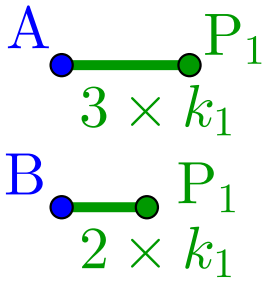


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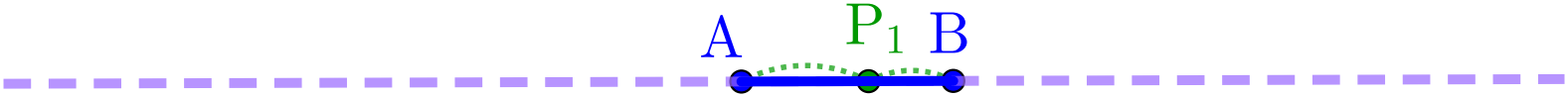


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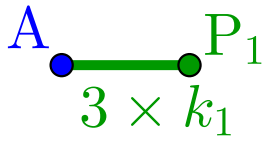


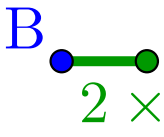


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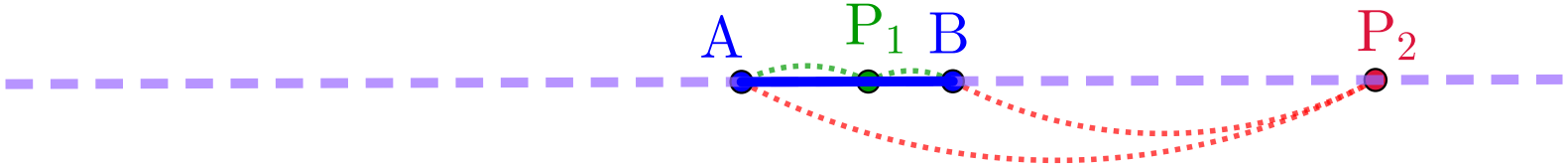




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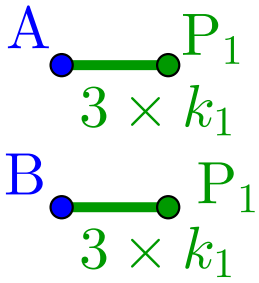


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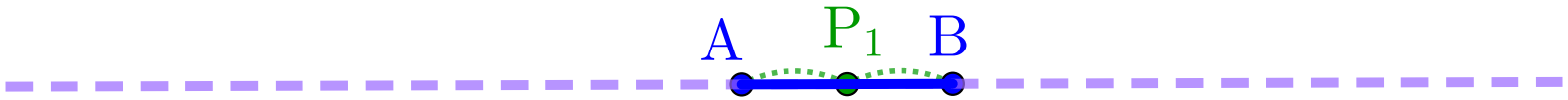


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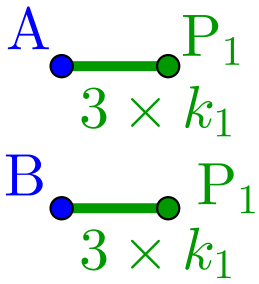
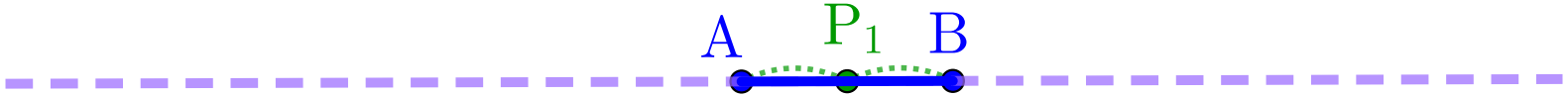
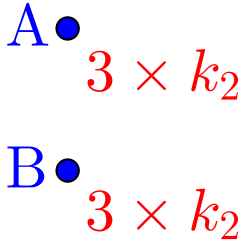



**Internal Divison**




**External Division**

# The internal division and the external divison of a line segment

## Theorem

수직선 위의

## Theorem

수직선 위의 두 점 $A(x_1), B(x_2)$에 대하여

## Theorem

수직선 위의 두 점 $A(x_1), B(x_2)$에 대하여 $\overline{AB}$를

## Theorem

수직선 위의 두 점 $A(x_1), B(x_2)$에 대하여 $\overline{AB}$를 $m : n$ 으로

## Theorem

수직선 위의 두 점 $A(x_1), B(x_2)$에 대하여 $\overline{AB}$를 $m : n$ 으로

(1) 내분하는 점

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

(2) 외분하는 점

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

(2) 외분하는 점 $\mathrm{P}_2 \left( \dfrac{mx_2 - nx_1}{m-n} \right)$

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

(2) 외분하는 점 $\mathrm{P}_2 \left( \dfrac{mx_2 - nx_1}{m-n} \right) (m \neq n)$

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

(2) 외분하는 점 $\mathrm{P}_2 \left( \dfrac{mx_2 - nx_1}{m-n} \right) (m \neq n)$

## Theorem

좌표평면 위의

## Theorem

수직선 위의 두 점 $\mathrm{A}(x_1), \mathrm{B}(x_2)$에 대하여 $\overline{\mathrm{AB}}$를 $m : n$ 으로

(1) 내분하는 점 $\mathrm{P}_1 \left( \dfrac{mx_2 + nx_1}{m+n} \right)$

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## Theorem

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Github:
https://min7014.github.io/math20210506001.html

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