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- ?? Legend
- ??? Coord
- ?????? Transform
- ??? Scale
- ??? Axis
- ? Geom



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- ?? , ?? ????80 ,60?
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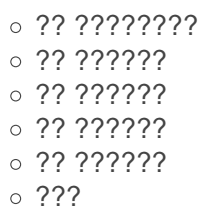
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# Coord



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## Coord -

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- ??????X ? Y ???????reflect?

- X
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- ??????X??Y? ???? false?

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# Transform



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## ?????? Transform - ???

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# Scale



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## ??? Scale - ???

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linear	?????	[1 ,2 ,3 ,4 ,5]
log	??????Log??	? [1,10,100,1000] ??? [0,1,2,3]
power	??????pow??	? [2,4,8,16,32] ??? [1,2,3,4,5]
cat	??	[ '?' , '?' ]
time	???????	????
timeCat	???????	????





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??0 ~ 1 ??? 0,1 ???0.2~0.8

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◦ ??? ?????????,??? **time ? timeCat** ?????86400?

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• **log??**

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• ??? **?cat** ???

• ?????**time ? timeCat** ???

◦ YYYY ?????

◦ MM ??? , 01 ~ 12?4?M = ??? , 3?M = ???

- DD ??? ,01 ~ 31 ?
- ddd ??? , ? ~ ??4?d = ????, 3?d = ?????
- HH ??? , 0 ~ 24?
- mm ??? , 0 ~ 59?
- ss ??? , 0 ~ 59?
- sss ??? , 0 ~ 999?

???YYYY-MM-DD(ddd)  
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• ?????? ?????????????????????



# Axis



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??? Axis - 

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# Geom



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## ? Geom - ???

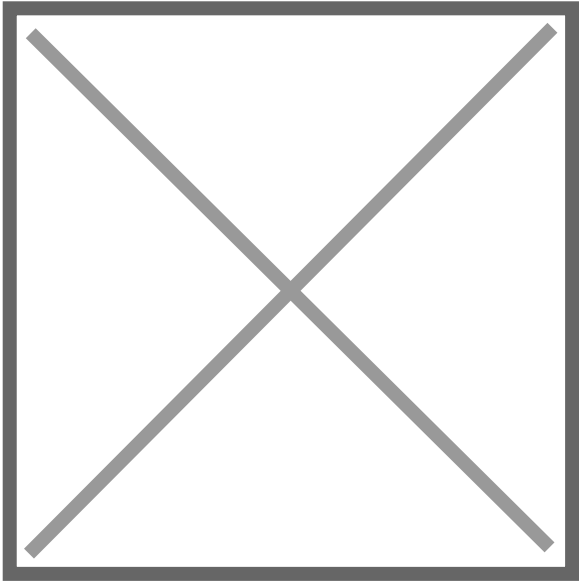
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- ???, ??????????
- ???, X??Y???????
- ?????, ??????
- ???number\*name

. ??

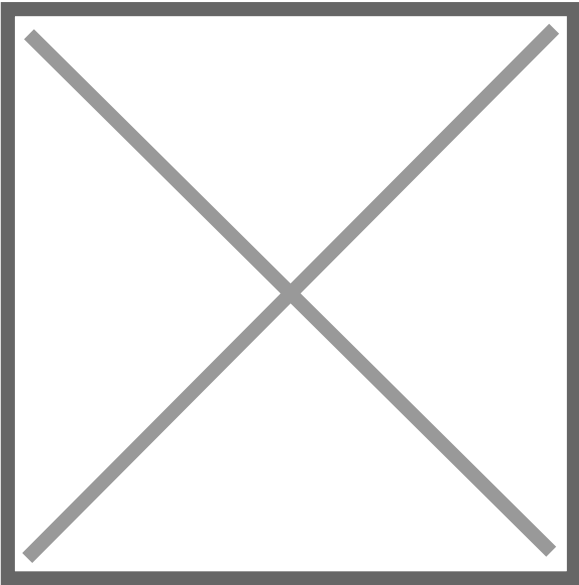
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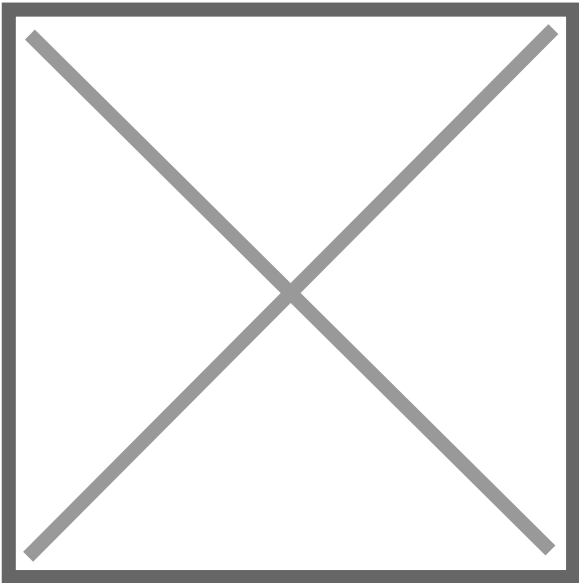
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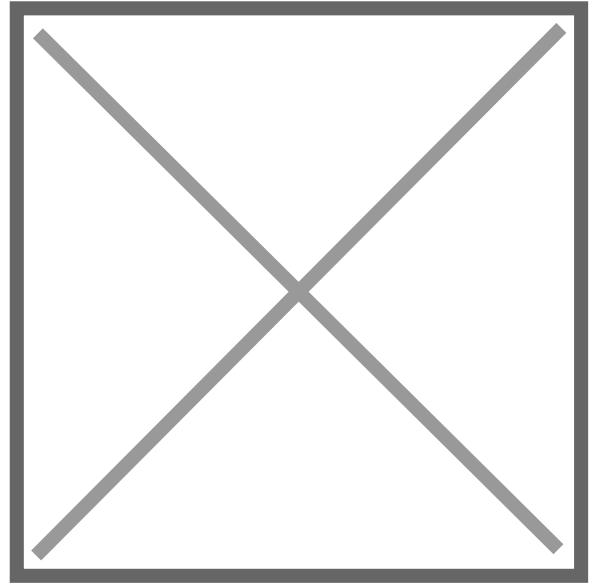
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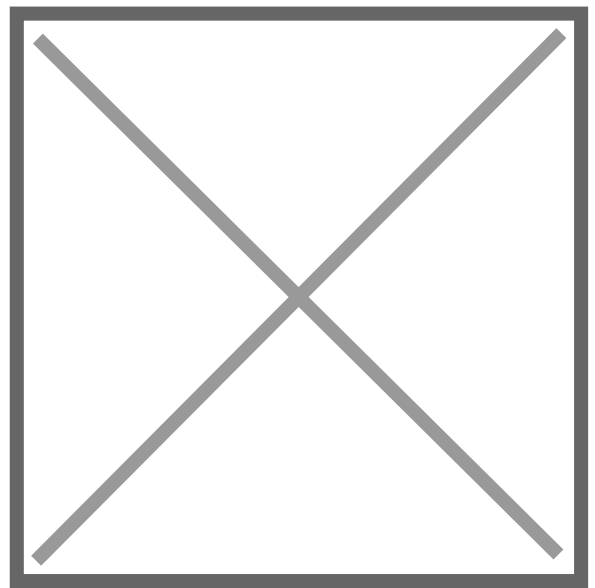




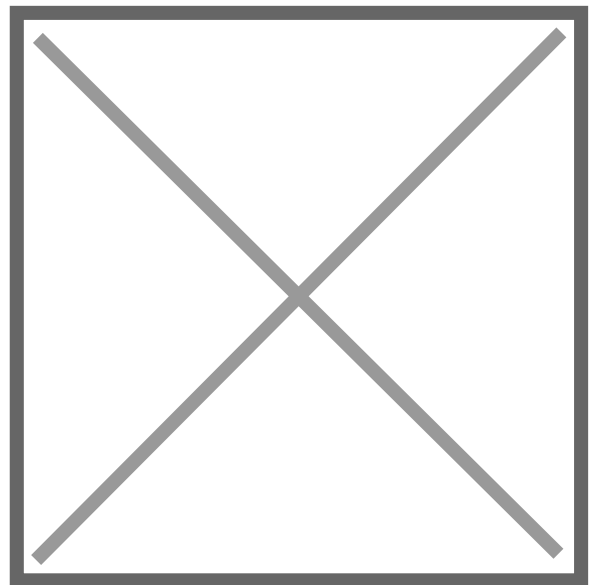
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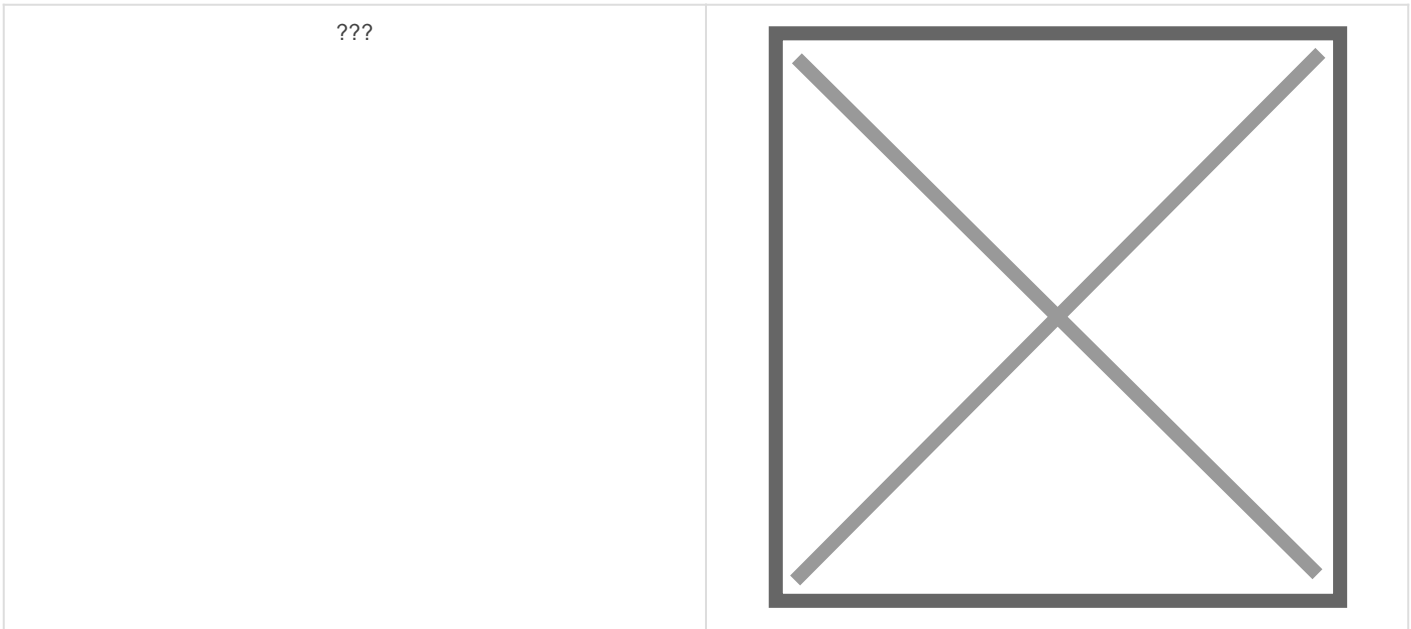


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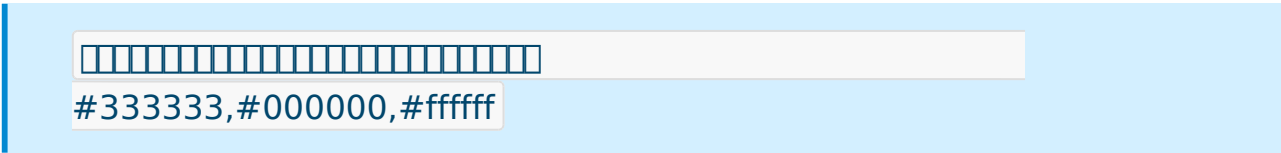




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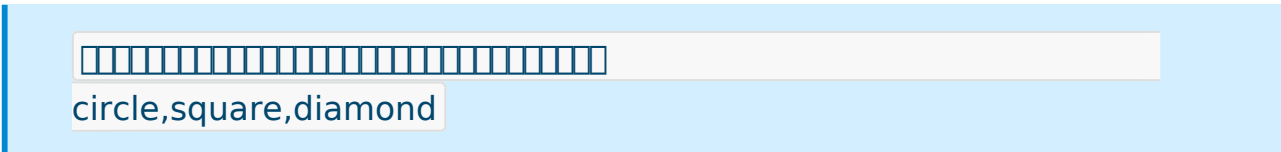
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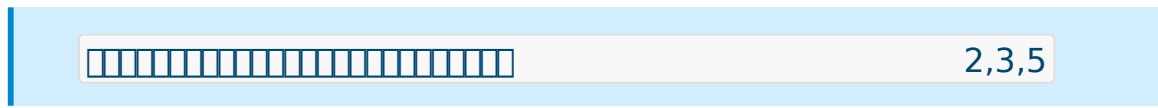
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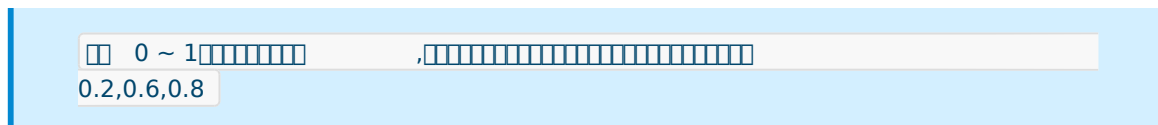
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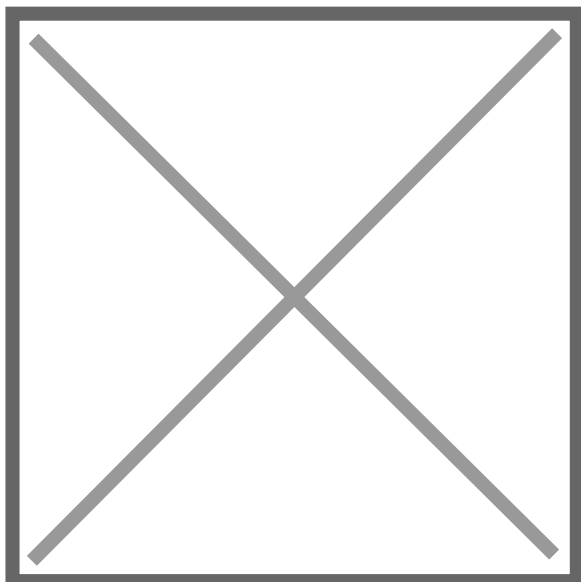
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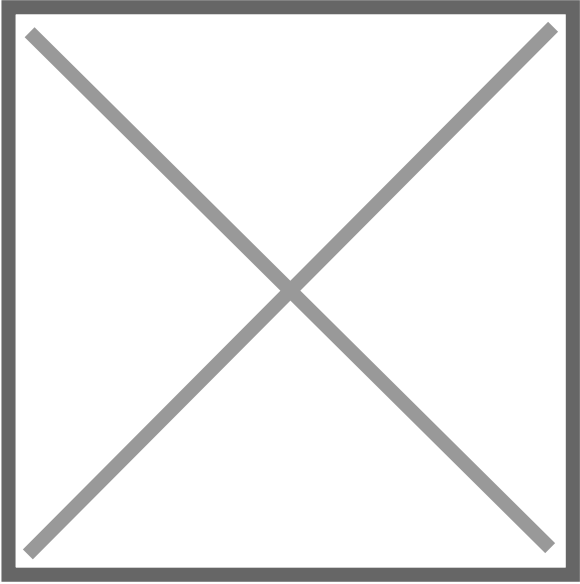
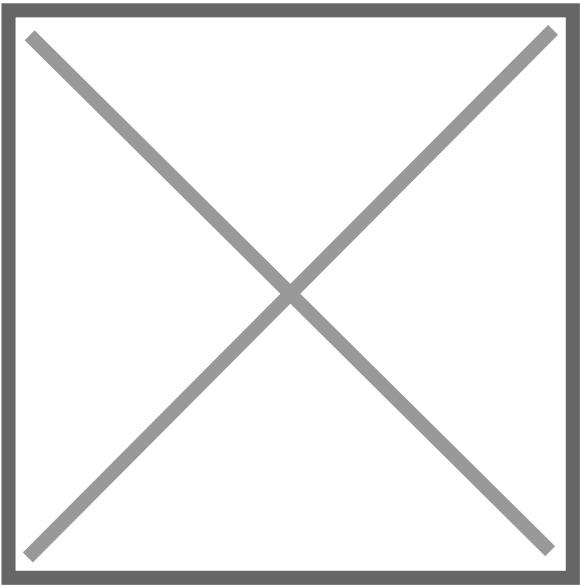
○ ??????

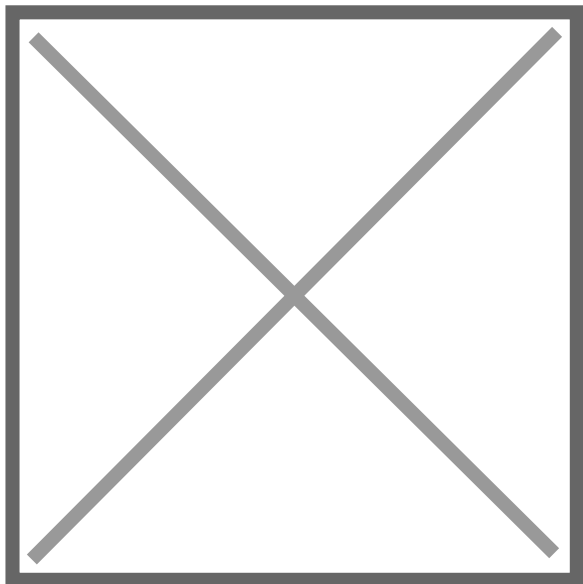


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## • DodgeRatio???? - ?????

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## • MarginRatio???? - ?????

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