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- [????????????](#)
- [?? Legend](#)
- [??? Coord](#)
- [?????? Transform](#)
- [??? Scale](#)
- [??? Axis](#)
- [? Geom](#)

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- ??????? ??? 0 ~ 1 ?

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

- X
- Y

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

- false
- true

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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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• ?????? ?? ?????????? ??? ?

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- **log??**

• ??

• ??? ?cat ???

. ?????time ? timeCat ???

- YYYYY ???? ?

- 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)
 ???2018-01-01(MON)

• ?????? ?????????????????????

??? Axis

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??? Axis - ???

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- ???? ?????????????????? 3 , 2 , 1 ?
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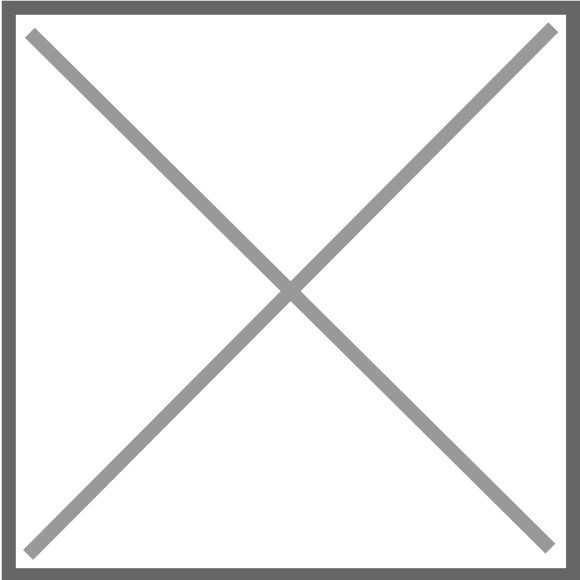
?[.png](#)

? Geom - ???

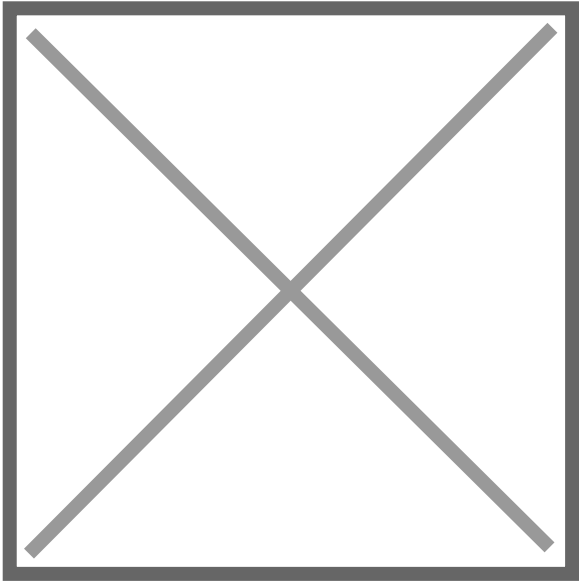
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- ??????????
- ???, ??????????
- ???, X??Y???????
- ????, ??????
- ???number*name

. ??

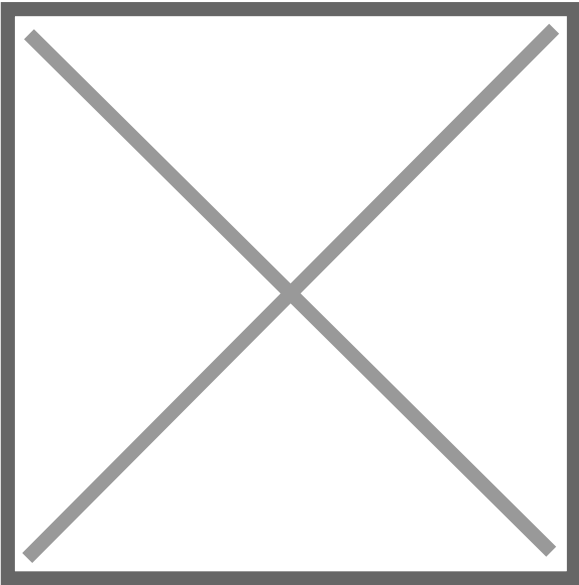
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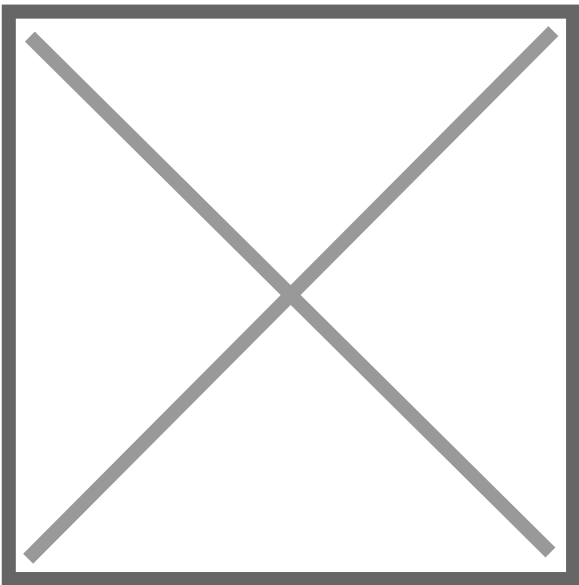
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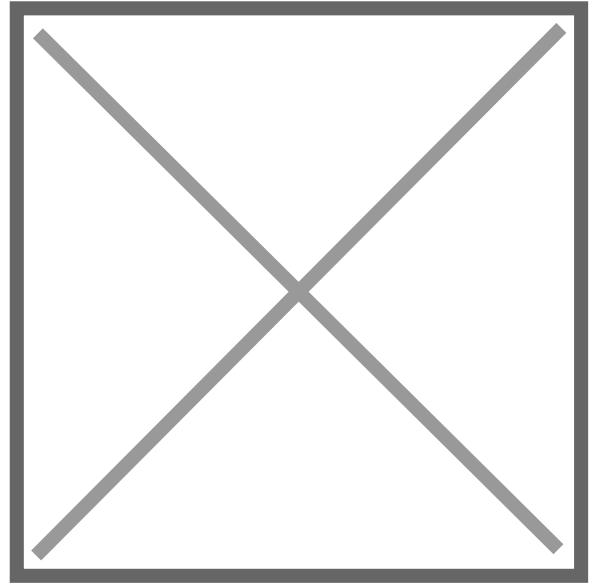


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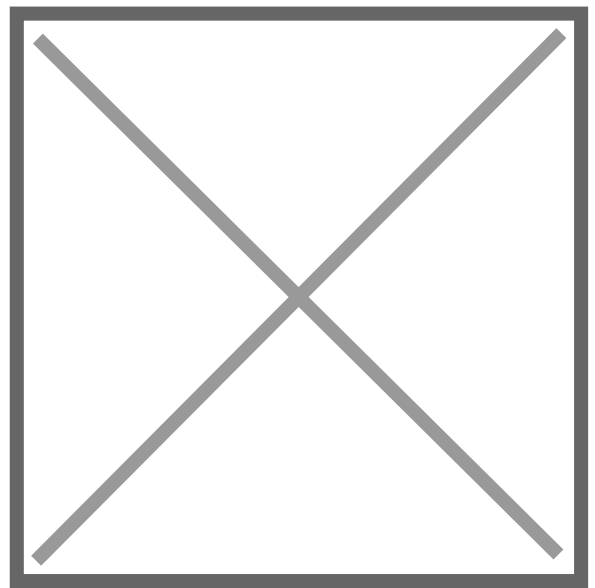
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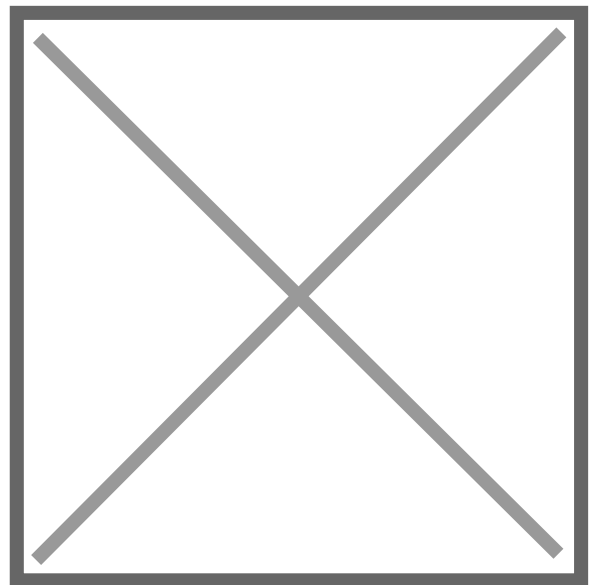
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K??



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The diagram consists of a square with a thick black border. Inside the square, there is a large 'X' formed by two diagonal lines crossing at the center. The lines are black and have a medium thickness. The square is positioned on the right side of the page, with the text '???' to its left.

• ?????????

- `□□□□□□□□□□□□□□□□#333333,#000000,#ffffff`

• ??

- circle, square, diamond

• ??

- ????

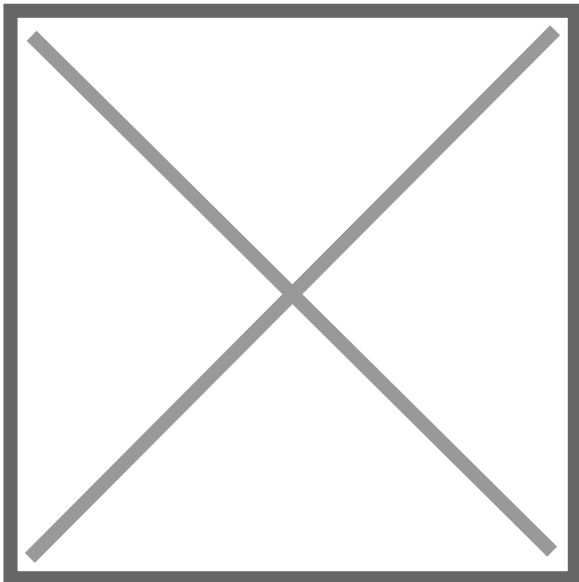
2,3,5

• ???

- ?????

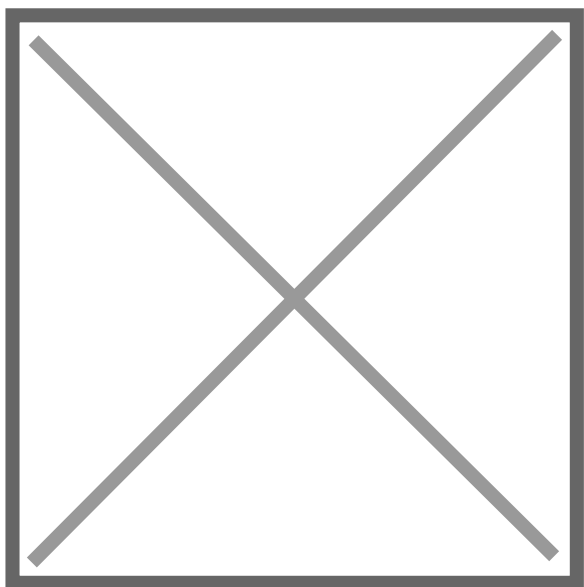
$x_0 \sim 1$, $x_1 \sim 0.2, 0.6, 0.8$

• ???????????

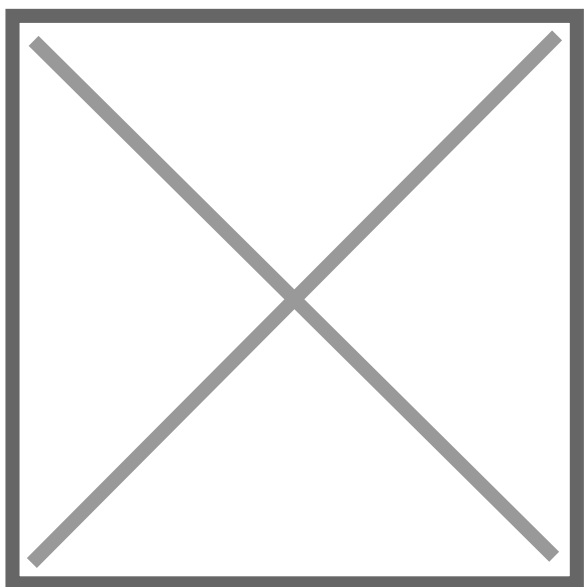


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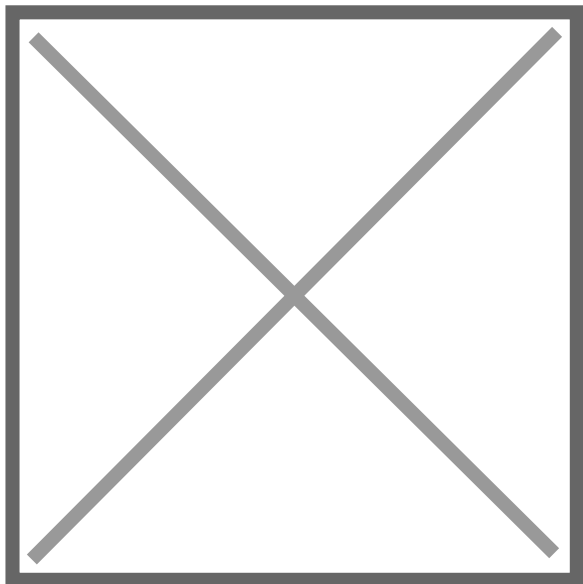
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• DodgeRatio???? - ?????

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• MarginRatio???? - ?????

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