Title: DOOMPS may reduce margin by \$16Bln. Discussion of Rule 10 of CBOE for Margin.

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Those \$0.50 puts that trade for \$0.01. Right now open interest is 136,213, meaning that 136,213 contracts covering 13,621,300 shares, just at \$0.50. Let's calculate margin for GME at \$150.

- The contract is trading for \$1.00 for the entire contract.
- 10% of underlying is \$1,500
- · Excess OTM amount over exercise price
 - Exercise price \$50.00
 - o \$15,000-\$50=\$14,950
- Margin for a DOOMP is \$1+\$1,500-\$14,950=-\$13,449 margin
- So 136,213 open contracts at just this strike represents a reduction of margin of \$1,831,929,637
- At an 8.8:1 leverage, per the reference above, that would represent a margin reduction of \$16,120,972,005.

Margin and how much is calculated.

Margin requirement is based on CBOE rule 10 for margin. Specifically for this example we will look at

- 10.3(a)2 Definition of current market value.
- 10.3(c)4(A) Initial and Maintenance Margin Requirements on Long Options
- 10.3(c)5(A) Initial and Maintenance Margin Requirements on Short Options
- 10.3(c)5(C)(iv) Exemptions

All are shown below.

10.3(c)4(A). This bad boy says that margin for a call is equal to 100% of current market value of option or warrant plus 10% of the same number of shares at current market price. Now normally, this "current market value" is where fuckery resides. For this example we will assume everything is on the up and up and use the CBOE's definition of "current market value". So for example, if the GME20220218c250 option is trading at \$7.85, \$785 for the contract, and GME is trading at \$150, then margin for the February 18th, 2022 call is \$785+10%*\$15,000, or \$2285.. If leverage is used on top of this margin at a rate of 10:1, then the margin required would be \$228.50.

10.3(c)5(A) says that the margin for a short position is equal to a bare minimum of 100% of the value of the option plus 10% of the value of the underlying component reduced by any excess OTM amount. The table shows this value is defined for selling a call as

 Any excess of the aggregate exercise price of the option over the current market value of the equivalent number of shares of the underlying security.

So selling a 2/18/22 \$250 call would mean margin is equal the sum of

- . \$835, the value of the contract
- \$1,500 for 10% of underlying
- (\$250-\$150)*100=\$10,000 reduction in margin

So an overall reduction in margin of \$7665 net.

(4) Initial and Maintenance Margin Requirements on Long Options, Stock Index Warrants, Currency Index Warrants and Currency Warrants. Options and warrants carried "long" in a customer's account shall be margined as follows:

(A) Listed or OTC Options Expiring in 9 Months or Less. In the case of any put or call option, stock index warrant, currency index warrant or currency warrant which expires in 9 months or less, initial margin must be deposited and maintained equal to at least 100% of the current market value of the option or warrant. Margin and how much is calculated.

Margin requirement is based on CBOE rule 10 for margin. Specifically for this example we will look at

- 10.3(a)2 Definition of current market value.
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- 10.3(c)5(A) Initial and Maintenance Margin Requirements on Short Options

All are shown in the attached pictures

(5) Initial and Maintenance Margin Requirements on Short Options, Stock Index Warrants, Currency Index Warrants and Currency Warrants.

(A) Listed. General Rule. The initial and maintenance margin required on any listed put, call, stock index warrant, currency index warrant or currency warrant carried "short" in a customer's account shall be 100% of the current market value of the option or warrant plus the percentage of the current "underlying component value" (as described in column IV of the table below) specified in column II of the table below reduced by any "out-of-the-money" amount as defined in this subparagraph (c)(5)(A) below.

Notwithstanding the margin required above, the minimum margin for each such call option or call warrant shall not be less than 100% of the current market value of the option or warrant plus the percentage of the current market value of the underlying component specified in column III of the table below, and for each such put option or put warrant, shall not be less than 100% of the current market value of the option or warrant plus the percentage of the option or warrant's aggregate exercise price amount specified in column III of the table below.

I. Type of Option	II. Initial and/or Maintenance Margin Required	III. Minimum Margin Required	IV. Underlying Component Value
1. Stock	20%	10%	The equivalent number of shares at current market prices.
2. Narrow based index as defined in Rule 4.11 and Micro Narrow-Based Index as defined in Rule 4.10(d)	20%	10%	The product of the current index group value and the applicable index multiplier.

For purposes of this subparagraph (c)(5)(A), "out-of-the-money" amounts are determined as follows:

Option or Warrant Issue	Call	Put
Stock Options, Registered Investment Company Options	Any excess of the aggregate exercise price of the option over the current market value of the equivalent number of shares of the underlying security.	market value of the equivalent number of shares of the underlying security over the