How to Trade Futures

Contract specifications and the maths that comes before the chart

THE FOUR THINGS SETTLED BEFORE YOU CLICK BUY

1. A broker that clears on a real exchange.
2. A contract whose tick value your account can absorb.
3. A position size expressed in dollars, not in contracts.
4. A written level at which you accept you were wrong.

THE CONTRACTS WORTH KNOWING

Contract	Sym	Exch	Contract size	Tick	Tick value
E-mini S&P 500	ES	CME	$50 x index	0.25	$12.50
Micro E-mini S&P 500	MES	CME	$5 x index	0.25	$1.25
E-mini Nasdaq-100	NQ	CME	$20 x index	0.25	$5.00
Micro E-mini Nasdaq-100	MNQ	CME	$2 x index	0.25	$0.50
E-mini Dow	YM	CBOT	$5 x index	1.00	$5.00
Micro E-mini Dow	MYM	CBOT	$0.50 x index	1.00	$0.50
E-mini Russell 2000	RTY	CME	$50 x index	0.10	$5.00
Micro E-mini Russell 2000	M2K	CME	$5 x index	0.10	$0.50
Gold	GC	COMEX	100 troy oz	0.10	$10.00
Micro Gold	MGC	COMEX	10 troy oz	0.10	$1.00
Silver	SI	COMEX	5,000 troy oz	0.005	$25.00
Crude Oil (WTI)	CL	NYMEX	1,000 barrels	0.01	$10.00
Micro Crude Oil	MCL	NYMEX	100 barrels	0.01	$1.00
Natural Gas	NG	NYMEX	10,000 MMBtu	0.001	$10.00
10-Year T-Note	ZN	CBOT	$100,000 face	1/64	$15.625
30-Year T-Bond	ZB	CBOT	$100,000 face	1/32	$31.25
Euro FX	6E	CME	EUR 125,000	0.00005	$6.25

Source: CME Group, CBOT, COMEX and NYMEX contract specifications. Index contracts are cash settled; metals, energy, rates and FX above are physically settled. Margin is set by the exchange, raised at the broker's discretion and moves with volatility - it is deliberately not listed here, because any number printed on a sheet is out of date by the time you read it.

The Sizing Maths

Size follows the stop, never the reverse

THE THREE FORMULAS

Risk per contract = stop distance in ticks x tick value

Dollar risk = account x risk %

Contracts = dollar risk / risk per contract, rounded DOWN

THE ROUNDING IS THE POINT

Contracts are whole numbers, so the maths almost never comes out even. Always round down. The leftover risk budget is not wasted - it is the margin of safety you did not have to argue yourself into. Rounding up to 'use the full risk' is how a 1% plan becomes a 1.6% trade.

WORKED: A $25,000 ACCOUNT RISKING 1% ($250)

Sym	Stop	Risk / contract	Contracts	Actual risk	Result
ES	40 ticks	$500.00	0	-	too big
MES	40 ticks	$50.00	5	$250.00	1.00% of account
NQ	40 ticks	$200.00	1	$200.00	0.80% of account
MNQ	40 ticks	$20.00	12	$240.00	0.96% of account
GC	40 ticks	$400.00	0	-	too big
MGC	40 ticks	$40.00	6	$240.00	0.96% of account
CL	40 ticks	$400.00	0	-	too big
MCL	40 ticks	$40.00	6	$240.00	0.96% of account

The same 40-tick stop is a $500 risk on one ES and a $50 risk on one MES. On a $25,000 account at 1%, ES is not tradeable at that stop and MES gives you five contracts. This is the entire argument for micros.

CORRELATED POSITIONS ARE ONE POSITION

ES, NQ, YM and RTY are four expressions of the same trade on most days. Long two ES and two NQ at 1% each is a 4% bet on US equities, not four separate 1% bets. Size the theme, then split it across the contracts - never size each leg as though it were independent.

The Cost of Friction

How a zero-sum market becomes negative-sum

HOW FAR PRICE MUST MOVE JUST TO COVER COMMISSION

Symbol	Tick value	Ticks to cover $4 RT	Ticks to cover $8 RT
ES	$12.50	0.32 ticks	0.64 ticks
MES	$1.25	3.20 ticks	6.40 ticks
NQ	$5.00	0.80 ticks	1.60 ticks
MNQ	$0.50	8.00 ticks	16.00 ticks
YM	$5.00	0.80 ticks	1.60 ticks
MYM	$0.50	8.00 ticks	16.00 ticks
RTY	$5.00	0.80 ticks	1.60 ticks
M2K	$0.50	8.00 ticks	16.00 ticks
GC	$10.00	0.40 ticks	0.80 ticks
MGC	$1.00	4.00 ticks	8.00 ticks
SI	$25.00	0.16 ticks	0.32 ticks
CL	$10.00	0.40 ticks	0.80 ticks
MCL	$1.00	4.00 ticks	8.00 ticks
NG	$10.00	0.40 ticks	0.80 ticks
ZN	$15.625	0.26 ticks	0.51 ticks
ZB	$31.25	0.13 ticks	0.26 ticks
6E	$6.25	0.64 ticks	1.28 ticks

Round turn (RT) means the commission on entry and exit combined. $4 is a reasonable retail default; $8 is what an unnegotiated account often pays.

READ THAT TABLE AGAIN

One ES tick covers a $4 round turn three times over. One MNQ tick covers a third of it. The micro is not simply a smaller version of the big contract - it is a structurally more expensive one, because commission does not shrink with tick value. Micros buy you correct position sizing, and you pay for that in friction. That is a good trade. Know you are making it.

THE FOUR COSTS, IN THE ORDER THEY HURT

Cost	What it is	How to reduce it
Commission	Broker + exchange + NFA fees, per side	Negotiate at volume; trade fewer, better
Spread	Bid-ask, usually one tick on liquid contracts	Trade liquid contracts in liquid hours
Slippage	The fill you get vs the fill you wanted	Limit orders; avoid thin sessions and news
Data	Exchange fees per market, per month	Subscribe only to what you actually trade

Slippage is the one traders underestimate. At ten contracts, one tick of slippage on entry and one on exit costs twenty ticks of value before the trade has done anything at all.

THE ZERO-SUM ARITHMETIC

Futures are a transfer market: every dollar won is a dollar lost by someone else, minus costs. That makes the aggregate outcome negative-sum for participants as a group, before anyone has made a single decision. You are not trying to beat the market. You are trying to beat the other participants by more than the friction costs you.

Before You Fund Anything

Setup, rules, and the checks that survive contact

THE SETUP DECISIONS, IN ORDER

Decision	What actually matters
Broker	Real exchange clearing, commission schedule in writing, platform support, funding rails
Platform	Depth of market and order-entry quality first; charting second
Data	Real-time exchange data per market, priced monthly - budget for it before you start
Contract	Pick one. Learn its personality for months before adding a second
Account type	Your own capital, or a funded evaluation with someone else's rules

MARGIN IS A PERFORMANCE BOND, NOT A LOAN

You are not borrowing money to buy the contract. You are posting collateral against a promise to settle daily. Nothing is 'financed', there is no interest on the notional, and the position is marked to market every single day - profits and losses move in cash, daily. Margin tells you what you may control. It tells you nothing about what you should risk.

PRE-TRADE CHECKLIST

1. Which contract, and is its tick value survivable on this account?
2. Where is the invalidation level, in ticks, written down before entry?
3. How many contracts does that stop allow at my stated risk percentage?
4. Is this correlated with anything already open? If yes, is the combined size still inside the plan?
5. How many days until expiry, and does this contract settle physically?
6. What is the all-in cost of being wrong, commission included?
7. Am I trading a liquid session, or am I about to pay for thin depth?

THE RULES THAT DECIDE THE OUTCOME

A fixed maximum risk per trade, written down, that you do not renegotiate mid-trade.
A daily loss limit that stops you trading for the day, no exceptions and no 'one more'.
Correlated exposure counted as one position, not several.
No size increase after a loss. No size increase to make back a loss. Ever.
A stop that exists in the market, not in your head.

EXPIRY AND CONTINUOUS CHARTS

Every contract dies. Physically settled contracts must be closed or rolled before delivery obligations begin - check first notice day, not just last trading day. And be aware that the continuous chart your platform draws is stitched from successive contracts, which means the prices in the historical record at each roll never traded. Backtests that ignore this are measuring something that did not happen.

Sources and Next Steps

Where the figures came from, and what to read next

SOURCES

CME Group, CBOT, COMEX, NYMEX
Contract specifications for every contract in the table on page 1 - contract size, tick size, tick value, settlement type and trading hours. Always the primary source; specs do change.

Your broker
Current initial and maintenance margin, day-trade margin, commission schedule and exchange data fees. These vary by broker and by volatility regime, which is why none are printed here.

The article
completetradersedge.com/how-to-trade-futures/ - the full guide, including the interactive position size calculator built on the table on page 1.

HOW TO READ THE FIGURES ON THIS SHEET

Contract sizes, ticks and tick values are exchange standards and are stable, but not permanent.
The commission figures are illustrative defaults, not quotes. Margin is deliberately absent.
Everything on page 2 and page 3 is arithmetic you can check yourself - and should.

RELATED READING

/prop-firm-risk-calculator/ - sizing against a daily loss limit rather than your own account. /what-is-a-funded-trading-account/ - what an evaluation actually buys you. /best-trading-tools-software-2026/ - the full platform, data and journalling stack with costs. /history-of-gold/ - if GC and MGC are why you are here.