

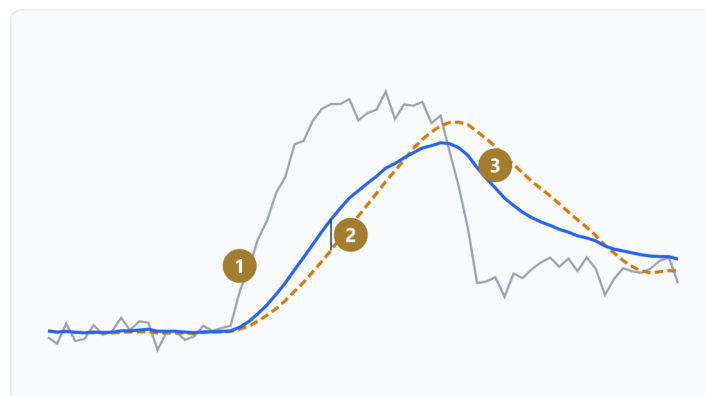
FORMULAS AND PERIODS

SMA = sum of the last n closes / n

EMA = close x k + previous EMA x (1 - k)

$k = 2 / (n + 1)$. For a 20 EMA, $k = 0.095$, so the latest close carries about 9.5% of the weight.

PERIOD	TYPICAL USE
9 / 21	Short-term momentum on intraday charts
20	Short-term trend and pullback support
50	Medium-term trend filter
200	Long-term trend: the line everyone watches



— Price — 20 EMA - - - 20 SMA

Same move: the EMA turns first (1 to 3), the SMA lags.

THREE SETUPS TO KNOW



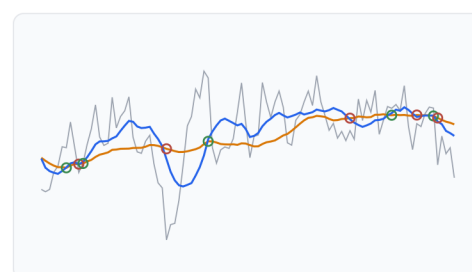
Golden and death cross

- 1 Price bottoms well before the cross.
- 2 50 (blue) crosses above 200 (orange): golden cross. Price tops before the death cross.
- 3 Use crosses as trend context, not entries.



Pullback to the 20 EMA

- 1 Uptrend: price above a rising 20 EMA.
- 2 Each pullback tags the EMA (1, 2, 3).
- 3 Buy the bullish candle off the EMA; stop below the swing low.



Whipsaw in a range

- 1 Flat averages, price chops sideways.
- 2 10 SMA (blue) and 30 SMA (orange) cross again and again.
- 3 Each crossover reverses. No trend, no MA trade.

SIGNALS

SIGNAL	WHAT IT MEANS	HOW TO ACT
Price above a rising 200-day	Long-term uptrend	Favour longs; skip most shorts
Price below a falling 200-day	Long-term downtrend	Favour shorts or stay flat
50 crosses above the 200 (golden cross)	Uptrend confirmed, late	Context for bias, not an entry trigger
50 crosses below the 200 (death cross)	Downtrend confirmed, late	Stop buying dips; review open longs
Bounce off a rising 20 or 50 EMA	Trend pullback is ending	Enter with the trend, stop below the swing low
Averages flat and tangled	No trend	Switch off MA signals; range tools instead

RULES OF THUMB

- Check the slope first. A flat average says nothing.
- Trade in the direction of the 200-day on the daily chart.
- Two or three averages is plenty.
- EMA for faster signals, SMA for smoother ones.
- Pick your periods and keep them. Do not curve-fit.

THE 3 MOST COMMON MISTAKES

- ✗ Trading every crossover in a sideways market.
- ✗ Expecting an average to call the top or bottom. It lags by design.
- ✗ Using the average as a stop without a buffer. Price often pokes through it.