Quick reference for sizing positions and managing risk on every trade. Use these formulas as a sanity check before clicking buy or sell. For interactive tools, see gromastech.com/forex-calculators/ or download Lot Size Calculator GT on Android.

1. Pip value

Value of one pip in your account currency, for a given lot size.

```
Pip value = (pip size / quote price) x trade size x cross rate
1 standard lot EUR/USD ~ $10 per pip   (USD account)
1 standard lot USD/JPY ~ $6.7 per pip  (varies with price)
```

Standard contract sizes

Standard lot	100,000 units
Mini lot	10,000 units (0.10)
Micro lot	1,000 units (0.01)

2. Position size (lot size)

The lot size that risks exactly the cash amount you choose if the stop loss is hit.

```
Cash at risk = account balance x risk %
Lot size     = cash at risk / (stop loss in pips x pip value per lot)
```

Worked example

Balance: $5,000 Risk: 1% Stop loss: 25 pips on EUR/USD (USD account)

Cash at risk = $5,000 x 1% = $50

Pip value per lot = $10

Lot size = $50 / ($10 x 25) = 0.20 standard lot

3. Risk / Reward (R:R) and break-even win rate

R:R is the ratio of pips at risk to pips of reward. The break-even win rate is the minimum hit rate needed to be flat over a long sample.

```
R:R = reward in pips / risk in pips
Break-even win rate = 1 / (1 + R)   where R is the R:R number
```

Quick table

R:R 1:1	needs 50.0% wins to break even
R:R 1:1.5	needs 40.0% wins to break even
R:R 1:2	needs 33.3% wins to break even
R:R 1:3	needs 25.0% wins to break even
R:R 1:5	needs 16.7% wins to break even

4. Required margin

Collateral your broker locks while a position is open.

```
Notional value  = lot size x contract size x current price
Required margin = notional value / leverage
```

Worked example

1 lot EUR/USD at 1.0850 with 1:30 leverage (USD account)
Notional = 100,000 x 1.0850 = $108,500
Required margin = $108,500 / 30 ~ $3,617

5. Profit / Loss

Result in pips and cash for any trade.

```
P/L pips = (exit - entry) / pip size                (long)
P/L pips = (entry - exit) / pip size                (short)
P/L cash = P/L pips x pip value per lot x lot size
```

6. Cost break-even

How many pips you need just to cover spread and commission.

```
Commission in pips = commission per lot / pip value per lot
Break-even pips   = spread + commission in pips
```

Worked example

EUR/USD raw-spread: 0.2 pip spread + $7/lot RT commission
Commission in pips = $7 / $10 = 0.7 pips
Break-even = 0.2 + 0.7 = 0.9 pips before profit

7. Compound account growth

Project balance over N periods at constant percent gain.

```
Final balance = starting balance x (1 + r) ^ N
  where r = period return (decimal), N = number of periods
```

Reality check

$5,000 at 1%/week for 52 weeks => $8,378
$5,000 at 2%/week for 52 weeks => $14,003
Realistic sustained weekly returns are usually well below 2%.

Interactive versions of every formula above:
Web tools: gromastech.com/forex-calculators/
Android app: gromastech.com/app-lotsizecalculator/
Free, no signup, runs offline on the Android app.