



Assumptions

1. Initial Investment:

\$1,000,000 for 20% equity
→ implies a \$5,000,000 post-money valuation.

2. Option Grant:

\$1,000,000 in options to buy additional equity at that same \$5M post-money valuation.

3. Next Round:

Company raises \$10,000,000 for 20% of the company → implies a \$50,000,000 post-money valuation

Step 1: After \$1M Investment

Post-money: \$5,000,000

Equity Breakdown (out of 100 units)

Shareholder	Units	Ownership%
Founder / Public Products	80	80.0%
Investor (Initial)	20	20.0%
Total	100	100.0%

Step 2: \$1M Option Exercised at \$5M Valuation

If \$1M buys 20% of the company at a \$5M valuation (same math as the original \$1M investment, then the option buys another 20%

To find how many units must be added to give 20%

$$\frac{x}{100+x} = 0.20 \rightarrow x = 25$$

New Total = 125 units

Shareholder	Units	Ownership%
Founder / Public Products	80	64.0%
Investor (Initial 20%)	20	16.0%
Investor (Option 20%)	25	20.0%
Total	125	100.0%



Step 3: Raise \$10M for 20% of Company

We now add new investors who must receive 20% of the post-money cap table.

$$\frac{x}{125+x} = 0.20 \rightarrow x = 31.25$$

New Total = 125 + 31.25 = 156.25 units

Shareholder	Units	Ownership%
Founder / Public Products	80	51.2%
Investor (Initial 20%)	20	12.8%
Investor (Option 20%)	25	16.0%
New Investor (\$10M for 20%)	31.25	20.0%
Total	156.25	100.0%

Final Summary

Group	Final Ownership%
Founder / Public Products	51.2%
Investor (Initial)	12.8%
Investor (Optional)	16.0%
New Investor (\$10M)	20.0%

Combined, the original investor ends up with 32.8% of the company if they invest \$1M upfront and exercise \$1M in option before the new round.

\$25,000

Initial Investment
Angel Round

\$160K

No Option Exercised
Valuation on Successful
VC Round

\$410K

Option Exercised
Valuation on Successful
VC Round