Cap Rates vs. Yield Rates

A cap rate is a snapshot. A yield rate is a movie. Both are percentages, both are applied to income, and they answer different questions.

THE SHORT VERSION

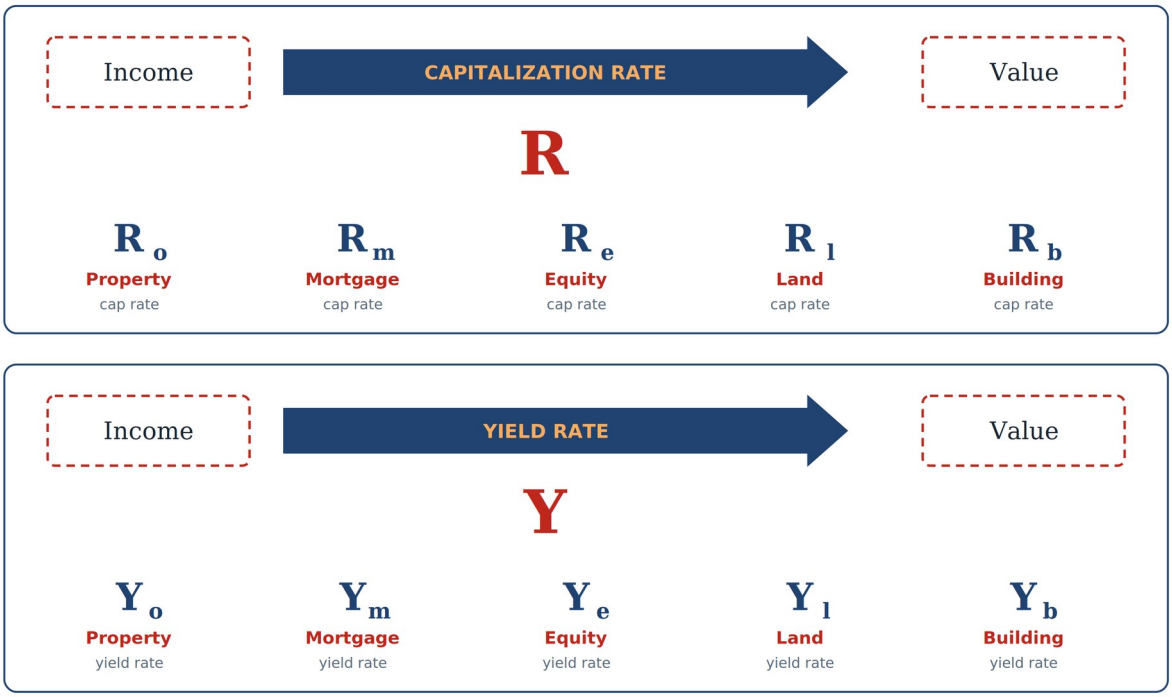
A cap rate looks at one year. A yield rate looks at every year.

That is the whole difference. One takes a single year's income and turns it into a value. The other follows the money for as long as the investor owns the property, including the day he sells it. They are both percentages and they are both applied to income, which is exactly why they get mixed up.

TWO FAMILIES OF RATES

Neither rate is a single number. Each is a family, and which member you use depends on whose income you are working with. A property cap rate goes with property income. A mortgage cap rate goes with mortgage income. An equity cap rate goes with equity income. Match the wrong pair and the answer is wrong even though the arithmetic is right.

The yield rates work the same way, with the same subscripts. Learn one family and you have learned both.



Two families, built the same way. R for cap rates, Y for yield rates — property, mortgage, equity, land, building.

DIRECT CAPITALIZATION — ONE YEAR

Buy a building for $1,000,000 that earns $80,000 in its first year, and the cap rate is 8%. Turn that around and you have a valuation method: if the market is paying 8% for buildings like this one, and this one earns $80,000, it is worth about $1,000,000.

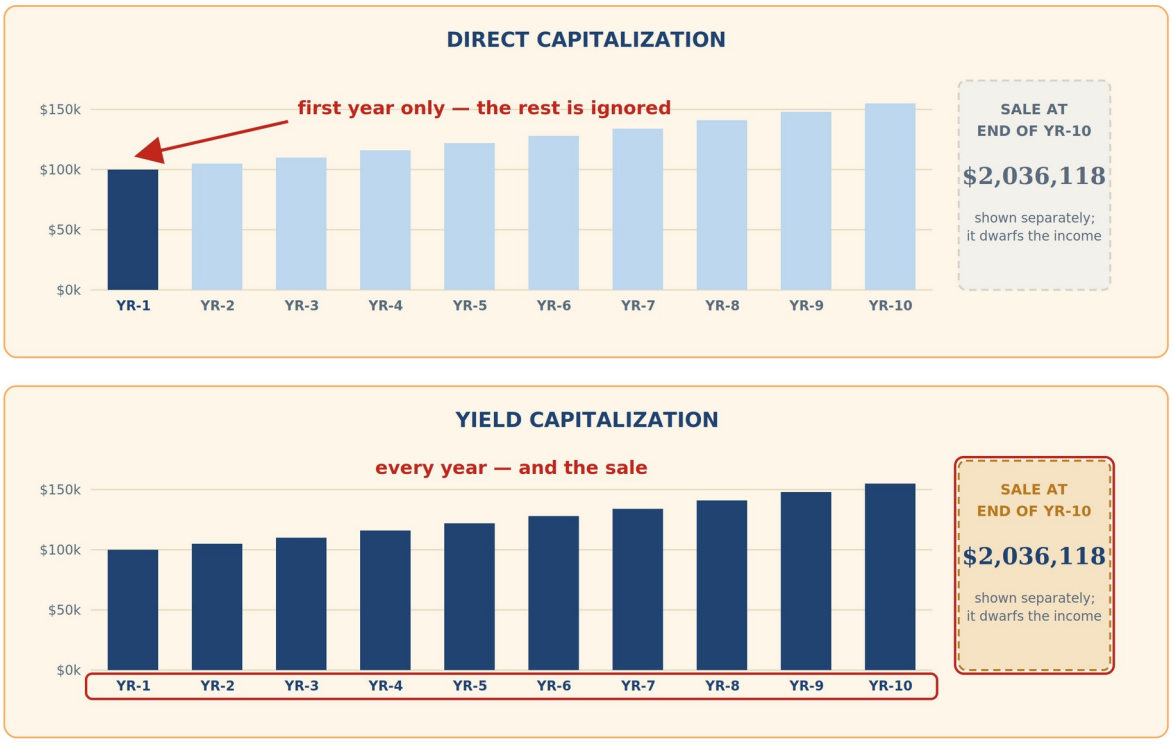
The rate is not invented. It is extracted from sales — you look at what buildings actually sold for and what they actually earned, and the market tells you the rate. The work is in finding sales similar enough that their rate means something for the subject.

Direct capitalization suits a property whose income is steady and predictable. An apartment building with a stable rent roll. A strip center that has been full for a decade. One year stands in for all the years because every year looks much the same.

YIELD CAPITALIZATION — EVERY YEAR

When the income is going to change, one year cannot stand in for the rest. A property leasing up. A lease that steps in year four. A tenant whose term expires mid-hold. In those cases you forecast each year, forecast the sale at the end, and discount all of it back to today, because a dollar ten years out is not worth a dollar now.

That is yield capitalization — what most people call a discounted cash flow. It is more work and it takes more assumptions, and every assumption is a place where two appraisers can part company.



The same property, the same ten years, seen two ways. Direct capitalization uses the first bar. Yield capitalization uses all ten and the sale.

THE SAME PROPERTY, WORKED THROUGH

Take the property in the chart. First-year income of $100,000, growing 5% a year. Sold at the end of year ten. An investor who wants an 8% yield discounts all ten years of income and the sale price back to today, and arrives at a value of about $1,761,000.

Now divide the first year's income by that value. $100,000 into $1,761,000 is 5.7%. That is the cap rate the sale would show if it closed at that price.

The investor wanted 8%. The building sold at a 5.7% cap rate. Nothing is contradictory about that — the two numbers are answering different questions.

The 8% is what he earns over ten years, growth and sale included. The 5.7% is what the first year's income happens to be as a percentage of the price. The gap between them is the growth.

HP12C KEYSTROKES — DISCOUNTED CASH FLOW

The same ten years shown in the chart above. The calculator does the discounting.

	f REG	Clear the calculator
0	g CF0	Nothing is paid out today — you are solving for value
100,000	g CFj	Year one income
105,000	g CFj	Year two
110,250	g CFj	Year three
	. . .	Years four through nine, entered the same way
2,191,251	g CFj	Year ten income of $155,133 plus the sale of $2,036,118
8	i	Discount rate → per year → 8%
	f NPV	Present value of the whole stream → $1,761,473

f is the gold shift key and g is the blue one. CFj shares a key with PMT; NPV shares a key with PV.

The calculator does the discounting. Enter the income, add the sale to the final year, enter the rate.

HOW THE TWO RATES RELATE

That example is one case of a general pattern, and it is worth knowing in all three directions.

HOW THE TWO RATES RELATE

Income is expected to GROW the buyer accepts less today because more is coming later	**R is LOWER than Y** cap 6% • yield 8%
Income is expected to be FLAT nothing is coming later, so the two are the same number	**R equals Y** cap 8% • yield 8%
Income is expected to DECLINE the buyer wants more now to cover what he loses later	**R is HIGHER than Y** cap 10% • yield 8%

Growth pulls the cap rate below the yield rate. Decline pushes it above. Flat income makes them the same.

This explains something that confuses people: a low cap rate does not mean a bad investment. It often means the market expects the income to grow, and buyers are paying today for what they expect to collect tomorrow.

TWO MISTAKES TO WATCH FOR

The first is treating a cap rate as a rate of return. It is not one. It is a ratio — a relationship between one year's income and one price. An 8% cap rate does not mean the investor earns 8% a year on his money. It means the building's first-year income is 8% of what he paid. Those are different statements, and only the second is true.

The second is subtler and more expensive: pulling a rate from one place and applying it to income built a different way. If the rate came from sales where reserves were deducted, and your income does not deduct reserves, the rate and the income do not belong together. The value that comes out is wrong even though every keystroke was right.

The rate and the income have to be built the same way. That is the single most important discipline in this whole exercise, and it is invisible unless you go looking for it.

General information, prepared for anyone who wants a plain-English handle on the subject — clients, students, and appraisers alike. It is a starting point, not a substitute for reading the source material and thinking it through for the assignment in front of you. Every assignment is different. Reach your own conclusions and own the work.