The basic ordinary share valuation formula

The value of a share of common stock is equal to the present value of all future cash flows (**dividends**) that is expected to provide over an infinite time horizon.

Equation:

$$P_0 = \frac{D_1}{(1+r)^1} + \frac{D_2}{(1+r)^2} + \frac{D_3}{(1+r)^3} + \cdots + \frac{D_\infty}{(1+r)^\infty}$$

Where

P_0 =Value of ordinary share
D_t = Per-share dividend expected at the end of year *t*
r =Required return on common stock

Zero-Growth Model

The zero dividend growth model assumes that the share (stock) will pay the same dividend each year, year after year.

Equation:

$$P_0 = \frac{D}{r}$$

Constant-Growth Model

The constant dividend growth model assumes that the share (stock) will pay dividends that grow at a constant rate each year—year after year forever.

For this you need to use two equations depending on whether you are given an **expected Dividend** or the **Past Dividend (the just paid dividend).**

Because the Constant-Growth formula works with the expected dividend if you are only given a **"just paid dividend"** you need to find the expected dividend using the following formula:

Formula: $D_1 = D_0(1+g)$

After this step they you are ready to substitute in the formula below:

Formula:

$$P_0 = \frac{D_1}{r-g}$$