Constant Growth Model

The Constant Growth Model goes by several names. It is also called the Dividend Discount Model, and the Gordon Model. The Constant Growth Model says that the value of a common stock is equal to the current cash flow (i.e. the dividend) divided by the difference between the risk inherent in that stock (i.e. the discount rate) and the expected growth in the cash flow. The less risk the stock possesses, the higher the value of the common stock. Also, the higher the growth rate, the higher the value of the common stock.

$$Common\ Stock\ Value = \frac{D_1}{(r - g)}$$

$$D_1 = Dividend\ in\ the\ Next\ Period$$
$$r = Discount\ Rate$$
$$g = Growth\ Rate\ in\ Dividend$$

The Constant Growth Model is often used in a three-stage model in which an analyst assumes rapid growth for a limited period of time, moderate growth for another limited period of time, and then sustainable growth (or constant growth) thereafter.

The Constant Growth Model is used to calculate the value of the stock when it finally reaches the constant growth stage; that estimate is then discounted to the present; and then the discounted value of that estimate is added to the present value of the cash flows generated in the other two stages.