10 **(a)** In an arithmetic progression the 5th term is 11. The 7th term is three times the 2nd term. Find the 1st term and the common difference. [4]

(b) A different arithmetic progression (AP) and a geometric progression (GP) have the following properties.

- The 1st terms of the AP and GP are both 3.
- The 2nd term of the AP is the same as the 3rd term of the GP.
- The 6th term of the AP is the same as the 5th term of the GP.
- The common ratio of the GP is greater than 1.

Find the common difference of the AP and the common ratio of the GP. [6]

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