Use the Remainder Theorem to find the remainder (without division) when

1) $x^3 + 4x + 2$ is divisible by $x + 2$	**2)** $x^4 - 3x^2 + 4x - 12$ is divided by $x - 3$.
3) $4x^3 - 3x^2 + 5x + 4$ is divided by $2x + 1$	**4)** $4x^3 + 5x^2 + 6x - 7$ is divided by $2x - 1$

5) $y^3 + y^2 - 2y + 1$ is divided by $y - 3$	**6)** $2x^3 - 3x^2 + 7x - 8$ is divided by $x - 1$