Guess a possible non-homog soln for the following DEs:

1a.) \( y'' - 4y' - 9y = 4\cos(3t) \)

   Guess: \__________________________

1b.) \( y'' - 9y = 4\cos(3t) \)

   Guess: \__________________________

   since no \( y' \) term, do not need_____ term as no _____ will appear on LHS when plug in guess.

1c.) \( y'' - 9y' = 4\cos(3t) \)

   Guess: \__________________________

1d.) \( y'' + 9y = 4\cos(9t) \)

   Guess: \__________________________

1e.) \( y'' + 9y = 4\cos(3t) \)

   Guess: \__________________________
2a.) \( y'' + 9y = 4\cos(9t) + t \)

Guess: 

2b.) \( y'' + 9y = 4\cos(3t) + t \)

Guess: 

2c.) \( y'' + 9y = 4t\cos(9t) \)

Guess: 

Alternatively, plus in wrong guess and see what is missing.

2d.) \( y'' + 9y = 4t\cos(3t) \)

Guess: 