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 = 4tcos(9t)

Guess:

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

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

Guess: