!!! For each problem put the answer next to it !!!

1. Evaluate (a) $\sin(0.3 + i)$, (b) 1^i

2. Let C be the positively oriented circle $|z-1| = 1$. Evaluate $\int_C \frac{1}{(z-0.5)(z-1.8)} dz$.

3. Find a general solution for $\frac{dy}{dx} - y + e^x + e^{2x} = 0$.

4. Find a general solution for $\dot{x} + x + y = 0; \dot{x} + \dot{y} + x = 0$.

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