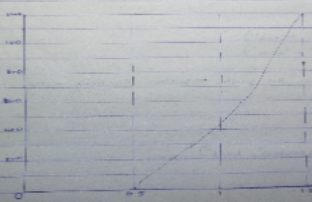


```

% (10) command window
clear
close
close

% solve for x
syms x
eq1 = diff(y(x)) - 2*x == exp(-2*x);
eq2 = diff(y(x)) + y(x) == 0;
conds = [y(0) == 1, y(1) == 2];
sol = solve(eq1, eq2, conds);
plot(x, sol.y);

```



```

% (10) command window
clear
close
close

% solve for x
syms x
eq1 = diff(y(x)) - 2*x == exp(-2*x);
eq2 = diff(y(x)) + y(x) == 0;
conds = [y(0) == 1, y(1) == 2];
sol = solve(eq1, eq2, conds);
plot(x, sol.y);

```

9) visualizing the solution on graph according to each case.

```

P = plot(x, sol);
E = plot(y, sol);
grid on;
legend('P', 'local', 'best');
legend('y', 'local', 'best');

```

10) visualizing the solution on graph together together with

```

P = plot(x, sol);
hold on;
E = plot(y, sol);
grid on;
legend('local', 'y', 'local', 'best');

```

```

% (10) command window
clear
close
close

% solve for x
syms x
eq1 = diff(y(x)) - 2*x == exp(-2*x);
eq2 = diff(y(x)) + y(x) == 0;
conds = [y(0) == 1, y(1) == 2];
sol = solve(eq1, eq2, conds);
plot(x, sol.y);

```