

PROBLEM 5 (b)

```
import numpy as np
```

```
def fixed_pt(x):  
    return -np.sin(2 * x) + 5 * x / 4 - 3 / 4
```

```
x0 = 4.5
```

```
tol = 1e-11
```

```
Nmax = 1000
```

```
for i in range(Nmax):  
    x1 = fixed_pt(x0)  
  
    if abs(x1 - x0) < tol:  
        break
```

```
x0 = x1
```

```
print("Approx:", x1)
```