Problem 3:

```
lambda = 0.5; mu = 1/72;
format long
A = [2*lambda, -mu, 0, 0, 0;

    -2*lambda, mu+2*lambda, -2*mu, 0,0;

    0, -2*lambda, 2*(mu+lambda), -3*mu, 0;

    0,0, -2*lambda, 3*mu+lambda, -4*mu;
    1,1,1,1,1];

B = [0;0;0;0;1];
p = A\B;
p0 = p(1);p1=p(2);p2=p(3);
(p0+p1+p2)*100
```

```
ans =
   0.426574042209218
```

Therefore, as $t \to \infty$, both workers will be busy 0.42% of the time.