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```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% ENGR 133
% Program Description
% Takes values for blinds and outputs transmission and absorption
% values
%
% Assignment Information
%   Assignment:      Ma3_PA Task 2 exec
%   Author:          Zach Williams, will2051@purdue.edu
%   Team ID:         001-01
%   Contributor:     Name, login@purdue [repeat for each]
%   My contributor(s) helped me:
%       [ ] understand the assignment expectations without
%           telling me how they will approach it.
%       [ ] understand different ways to think about a solution
%           without helping me plan my solution.
%       [ ] think through the meaning of a specific error or
%           bug present in my code without looking at my code.
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

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## INITIALIZATION

```
spacing = 50;
width = 60;
absorpConst = .76;
angShadow = 45;
horiAngles = [30,45,60];
F1 = [0,0,0];
F2 = [0,0,0];
F3 = [0,0,0];
tranVal = [0,0,0];
absorpVal = [0,0,0];
```

---

## CALCULATIONS

```
for i = 1:3
    [F1(i),F2(i),F3(i)] =
    Ma3_PA_Task2_fractions_will2051(width,spacing,horiAngles(i));
    tranVal(i) =
    Ma3_PA_Task2_transmission_will2051(absorpConst,width,angShadow,horiAngles(i),spacing,F2
    absorpVal(i) =
    Ma3_PA_Task2_absorb_will2051(absorpConst,width,angShadow,horiAngles(i),spacing,F2
end
```

---

## OUTPUTS

```
for i = 1:3
    fprintf("The transmission value for Blind 1 at %d degrees is %f.
\n",horiAngles(i),tranVal(i));
    fprintf("The absorption value for Blind 1 at %d degrees is %f.
\n",horiAngles(i),absorpVal(i));
end
```

```
% 7a
%The transmission value for Blind 1 at 30 degrees is -0.572457.
%The absorption value for Blind 1 at 30 degrees is 1.387543.
%The transmission value for Blind 1 at 45 degrees is -0.648144.
%The absorption value for Blind 1 at 45 degrees is 1.416686.
%The transmission value for Blind 1 at 60 degrees is -0.607829.
%The absorption value for Blind 1 at 60 degrees is 1.343479.
```

```
The transmission value for Blind 1 at 30 degrees is -0.572457.
The absorption value for Blind 1 at 30 degrees is 1.387543.
The transmission value for Blind 1 at 45 degrees is -0.648144.
The absorption value for Blind 1 at 45 degrees is 1.416686.
The transmission value for Blind 1 at 60 degrees is -0.607829.
The absorption value for Blind 1 at 60 degrees is 1.343479.
```

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## ACADEMIC INTEGRITY STATEMENT

I have not used source code obtained from any other unauthorized source, either modified or unmodified. Neither have I provided access to my code to another. The project I am submitting is my own original work.

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