## M erry Christmas!

## Extra Credit Assignment

In the picture above, write equations of the two vertical lines and one parabola formed by the felt garland. All work must be shown and be correct in order to receive any credit. A written explanation(not required) of the steps you took to solve the problem may earn you more points than not writing an explanation.

## Information

1. The felt on each side goes from the floor to the ceiling.
2. The point where the felt intersects the floor on the left side should be regarded as the origin.
3. The height of the room is 11 feet.
4. The dark green tree is $60 \%$ larger than the light green tree.
5. The wooden mantle is 55 inches long and intersects the felt on the right side at a height of 66 inches off the ground.
6. If you draw lines from where the vertical felts intersect the parabolic felt to where the vertical felts intersect the wooden mantle on the opposite side, the two lines intersect at the lowest point of the parabolic felt.
7. The candle weighs 12 ounces.
