Questions to be answered as a group before class and presented in class:

1. What is the decision that Steve Twynstra needs to be make?
2. What criteria can you use to help Steve make the decision?
3. Perform a Net Present Value calculation for the new machinery investment

   Hint, if he buys the new machine he can sell the old one, so one must consider the incremental cash flows:
   a) List on a timeline, the annual cash inflows and outflows if Steve were to repair the current combine; if he were to buy the new machine the relevant cash flows will be opposite in sign to these cash flows
   b) List on a separate timeline, the cash inflows and outflows if Steve were to purchase a new combine and trade-in the old machine.
   c) Assuming tax rate of 21%, Cost of Capital of 15% and Capital Cost Allowance of 30%, the Present Value of the Tax Shield is $15,050
   d) Net out all the cash inflows and outflows from a, b and c and create a new timeline that represents the after tax cash flows from making the new machinery investment
   e) Compute the NPV of the after tax cash flows
   f) Compute a break-even analysis (this ignores the time value of money)
   g) Calculate the payback period (this ignores the time value of money)
   h) Assuming Steve can complete 4 acres per hour at $35 per acre, determine the amount of custom work required to make the NPV = 0 over the four year period (this requires a sensitivity analysis to get the IRR to be exactly 15%, remembering the Steve must pay taxes on the custom work).

4. Discuss the qualitative pros and cons of purchasing the new machine

5. As Steve Twynstra what should your decision be? Be prepared to support and justify your answer.