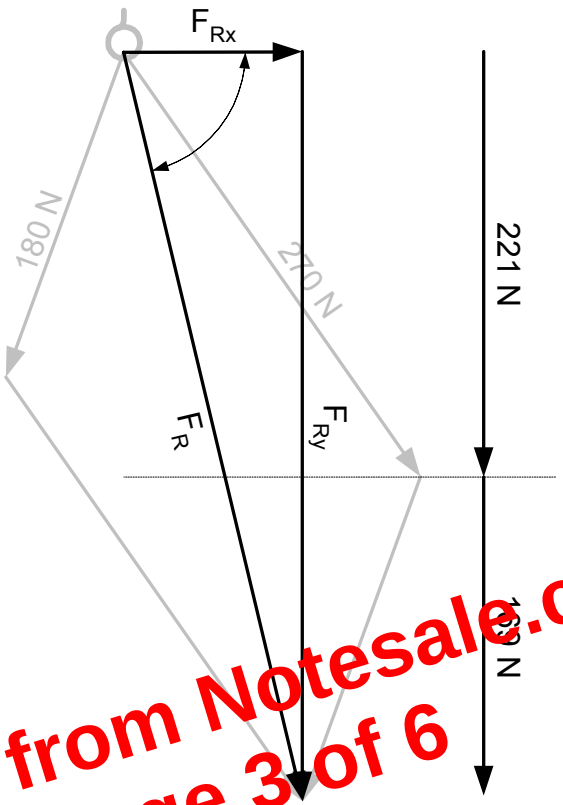
Solution, continued

To determine the combined force on the hook, F_R, first add the two y-components calculated above, to determine the combined y-directed force, F_{Ry}, on the hook:




```
» F_Ry = F_y1 + F_y2

F_Ry =

  390.3157
```

The y-component of the resultant force is 390 N (directed down, or in the –y direction). Note that the direction has not been accounted for in this calculation.

Then add the two x-components to determine the combined x-directed force, F_{Rx}, on the hook. Note that the two x-component forces are acting in opposite directions, so the combined x-directed force, F_{Rx}, is smaller than either of the components, and directed in the +x direction.