Illustration of SSD

The orange lottery dominates the blue lottery in the FSD sense**,** but no FSD relationship can be drawn between the green lottery and the other two lotteries.

However, imagine a decision maker who is risk averse, thus preferring less volatility to more at the same level of money. In that case the orange lottery is more attractive than the green lottery, for it provides higher expected value (6 vs 5) with lower standard deviation (2 vs 4).

The light blue area is smaller than the light red area, thus the orange lottery dominates the green lottery in the SSD sense.

In[36]:=
```
Plot[
 {CDF[NormalDistribution[5, 2], x],
  CDF[NormalDistribution[6, 2], x],
  CDF[NormalDistribution[5, 4], x]}, {x, 0, 14},
 PlotLegends → {{"N(5,2)", "N(6,2)", "N(5,4)"}},
 Filling →
  {2 → {{3}, {Directive[Red, Opacity[.1]], Directive[Blue, Opacity[.1]]}}},
 PlotStyle → {Thick}]
```

Out[36]=