The following three one year “discount” loans are available to you:

Loan A: $120,000 at a 7 percent discount rate

Loan B: $110,000 at a 6 percent discount rate

Loan C: $130,000 at a 6.5 percent discount rate

a. Determine the dollar amount of interest you would pay on each loan and indicate the amount of net proceeds each loan would provide. Which loan would provide you with the most upfront money when the loan takes place?

Loan A:

120,000 X 7% / 100 % = 8,400

120,000 – 8,400 = 111,600.

Loan B:

110,000 X 6% / 100 % =6,600

110,000 – 6,600 =103,400

Loan C:

130,000 X 6.5% / 100 % =8,450

130,000 – 8,450 = 121,550

We can make a conclusion that the Loan C will give us more upfront than any other.

b. Calculate the percent interest rate or effective costs of each loan. Which one has the lowest cost?

Loan A:

8,400 X 100% / 111,600 = 7.53%

Loan B:

6,600 X 100% / 103,400 = 6.38%

Loan C:

8,450 X 100% / 121,550 =6.95%

As you can see, the loan that will have the lowest cost is the Loan B.