The jones family, incorporated

[Family](#)

THE JONESFAMILY, INCORPORATED Principles of CorporateFinance6th Edition Richard A. Brealey and Stewart C. Myers The accompanying table summarizes Johnny's NPV calculation. He assumed Marsha would take 25 100-mile trips per year, saving $200, plus $1. 00 per mile, plus a $40 tip on every trip. Operating costs would be $. 45 per mile. The net savings are $295 per trip and $7375 per year.

These savings increase with inflation at an assumed rate of 4% per year. It seems that Marsha's horse transporter was a good buy after all: NPV is positive (+ $14, 325). MINICASE SOLUTIONS THE JONES FAMILY'S HORSE TRANSPORTER | Year | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 1.

Investment (plus ending value in | | | | | | | | | | | year 8) |-35, 000 | | | | | | | | | +15, 000 | | 2. Insurancea |-1, 200 |-1, 200 |-1, 200 |-1, 200 |-1, 200 |-1, 200 |-1, 200 |-1, 200 | | | 3.

Net savings vs. rented | | | | | | | | | | | transporterb | |+7, 375 |+7, 375 |+7, 375 |+7, 375 |+7, 375 |+7, 375 |+7, 375 |+7, 375 | | | | | | | | | | | | | | 4.

Cash flow |-36, 200 |+6, 175 |+6, 175 |+6, 175 |+6, 175 |+6, 175 |+6, 175 | +6, 175 |+21, 175 | | 5. Adjusted for 4% inflationc | | | | | | | | | | | |-36, 200 | +6, 422 |+6, 679 |+6, 946 |+7, 224 |+7, 513 |+7, 813 |+8, 126 |+28, 979 | | 6.

Present valued |-36, 200 |+5, 892 |+5, 622 |+5, 364 |+5, 118 |+4, 883 |+4, 658 |+4, 445 |+14, 543 | NPV = + 14, 325 a Paid at start of year. b Savings per 100-mile trip: 200 + 100 (1. 00 - . 45) + 40 = $295. For 25 trips per year, annual savings are 295 x 25 = $7375. Here the savings are entered at end of year (or start of the next year). This understates their value: the Jones family

would actually begin to save right away. c Savings increase by 4% per year. Year 8 cash inflows from line 4 are multiplied by (1. 04)8. d Line 5 discounted at 9%.