$\qquad$
Assume you are planning to buy a call on Saks $5^{\text {th }}$ Avenue with an exercise price of $\$ 9$ that expires 67 days from today on $1 / 18 / 13$. As soon as the call expires, you plan to buy a second call that expires 95 days from today on $2 / 15 / 13$. Saks' stock price currently equals $\$ 10$ per share. By $1 / 18 / 13$, you expect Saks' stock price to rise to $\$ 12$ per share and by $2 / 15 / 13$, you expect Saks' stock price to rise to $\$ 15$ per share. By a year from today (11/12/13), you expect Saks’ stock price to fall back to $\$ 11$ per share.

Using the following information, set up the equations and plug in as many numbers as possible to use the Black-Scholes option pricing model to value the option you are planning buy today.

Between now and:

| Standard deviation of returns on: | $\underline{1 / 18 / 13}$ |  | $\underline{2 / 15 / 13}$ |
| :--- | ---: | ---: | ---: |
| Saks' assets | $18.2 \%$ |  | $\underline{11 / 12 / 13}$ |
| Saks' stock | $39.4 \%$ | $40.4 \%$ |  |
| Saks' bonds | $4.5 \%$ | $4.1 .3 \%$ |  |
| An equivalent put | $45.6 \%$ | $52.5 \%$ | $54.8 \%$ |
| This call | $39.0 \%$ | $41.0 \%$ | $44.2 \%$ |
|  |  |  |  |
| Annualized return on: | $\underline{1 / 17 / 13}$ | $\underline{2 / 14 / 13}$ | $\underline{11 / 11 / 13}$ |
| U.S. Treasuries (all < 1\%): | $0.097 \%$ | $0.120 \%$ | $0.204 \%$ |
| Saks' bonds | $0.35 \%$ | $0.45 \%$ | $0.50 \%$ |

Wall Street Journal Questions are on the back of this page.

