Quiz A for 2:30 Class: 11/12/12
Name $\qquad$
Assume you are planning to buy a put on General Electric (GE) with an exercise price of \$20 that expires 95 days from today on $2 / 15 / 13$. If you buy the put, you would only plan to hold it for 67 days (until $1 / 18 / 13$ ). GE's stock price currently equals $\$ 21$ per share. By $1 / 18 / 13$, you expect GE's stock price to fall to $\$ 18$ per share and by $2 / 15 / 13$, you expect GE's stock price to fall to $\$ 15$ per share. By a year from today (11/12/13), you expect GE's stock price to rebound to $\$ 22$ 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 this option.

Between now and:

| Standard deviation of returns on: | $\underline{1 / 18 / 13}$ |  | $\underline{2 / 15 / 13}$ | $\underline{11 / 12 / 13}$ |
| :--- | ---: | ---: | ---: | ---: |
| GE's assets | $12.4 \%$ |  | $13.3 \%$ |  |
| GE's stock | $24.8 \%$ |  | $26.5 \%$ | $27.3 \%$ |
| GE's bonds | $3.5 \%$ | $3.6 \%$ | $3.8 \%$ |  |
| An equivalent call | $45.6 \%$ | $52.5 \%$ | $54.4 \%$ |  |
| This put | $39.0 \%$ | $41.0 \%$ | $44.2 \%$ |  |
|  |  |  |  |  |
| Annualized return on: | $\underline{1 / 17 / 13}$ | $\underline{2 / 14 / 13}$ | $\underline{11 / 11 / 13}$ |  |
| U.S. Treasuries (all < 1\%): | $0.097 \%$ | $0.120 \%$ | $0.204 \%$ |  |
| GE's bonds | $0.25 \%$ | $0.35 \%$ | $0.40 \%$ |  |

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

