UNIVERSITY OF TEXAS AT AUSTIN

Quiz #13

Spreads. Straddles. Strangles.

Please, provide your *final answer only* to the following problems.

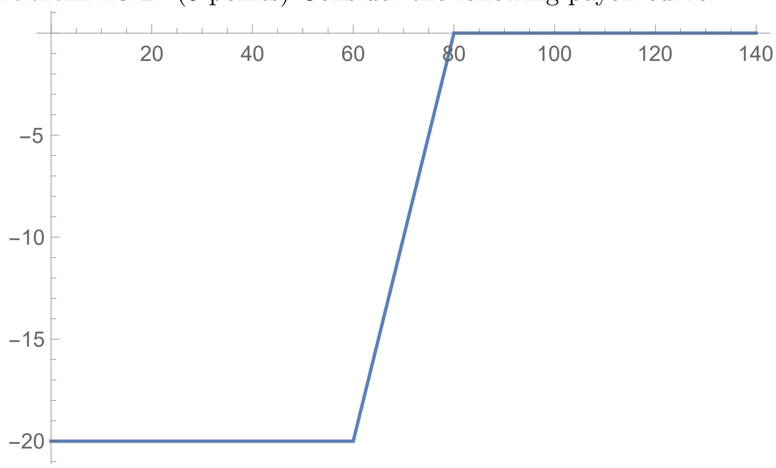
Problem 13.1. (5 points) An investor buys an \$850-strike, two-year straddle on gold. The price of gold two years from now is modeled using the following distribution:

$$\begin{aligned} &\$800, && \text{with probability } 0.35,\\ &\$850, && \text{with probability } 0.4,\\ &\$925, && \text{with probability } 0.25. \end{aligned}$$

What is the investor's expected payoff?

(a) About \$11.25
(b) About \$23.00
(c) About \$23.75
(d) About \$36.25
(e) None of the above.

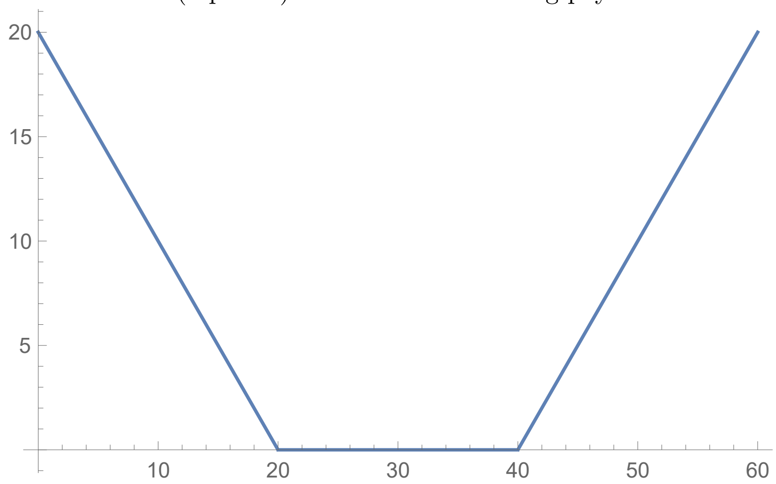
Problem 13.2. (5 points) Consider the following payoff curve:



Which of the following positions has the above payoff curve?

(a) A put bull spread.
(b) A call bull spread.
(c) A put bear spread.
(d) A call bear spread.
(e) None of the above.

Problem 13.3. (5 points) Consider the following payoff curve:



Which of the following positions has the above payoff curve?

(a) A straddle.
(b) A strangle.
(c) A bull spread.
(d) A bear spread.
(e) None of the above.