Assignment for Week 6
Oscillators, Bollinger Bands & Fibonacci

Choose the correct answer by <mark>highlighting</mark> it

Oscillators

1. Relative Strength Index (RSI)

1. The Relative Strength Index (RSI) typically uses a lookback period of:
   a) 7 days
   <mark>b) 14 days</mark>
   c) 30 days
   d) 50 days

2. An RSI value above 70 typically indicates:
   <mark>a) Overbought conditions</mark>
   b) Oversold conditions
   c) Bullish momentum
   d) Bearish momentum

3. Which value of RSI is typically considered oversold?
   a) Below 70
   b) Below 50
   <mark>c) Below 30</mark>
   d) Below 10

4. A divergence between RSI and price movement is often considered a signal of:
   a) Continuation
   <mark>b) Reversal</mark>
   c) Breakout
   d) Trend strengthening

5. RSI is classified as which type of indicator?
   a) Trend-following indicator
   b) Volatility indicator
   <mark>c) Momentum oscillator</mark>
   d) Volume-based indicator

2. MACD (Moving Average Convergence Divergence)

6. MACD is the difference between which two moving averages?
   a) 9-day EMA and 12-day EMA
   b) 12-day EMA and 26-day EMA
   c) 9-day EMA and 21-day EMA
   d) 26-day EMA and 50-day EMA

7. A buy signal in MACD is typically generated when:
   a) The MACD line crosses above the signal line
   b) The MACD histogram is below zero
   c) The price is above the MACD line
   d) The RSI is above 70

8. The MACD histogram represents the difference between:
   a) The price and the MACD line
   b) MACD line and signal line
   c) MACD line and RSI
   d) MACD line and moving averages

9. A bearish MACD signal occurs when:
   a) The MACD line crosses below the signal line
   b) The MACD histogram is positive
   c) The RSI is below 30
   d) Price is above the pivot point

10. The signal line in MACD is:
    a) A 9-period moving average of the MACD line
    b) A 14-period simple moving average
    c) A 20-period exponential moving average
    d) A 50-period weighted moving average

Bollinger Bands

11. What do Bollinger Bands primarily measure?
   - a) Volume
   - b) Trend
   - c) Volatility
   - d) Momentum

12. Bollinger Bands typically consist of how many lines?
   - a) One
   - b) Two
   - c) Three
   - d) Four

13. The default setting for the standard deviation in Bollinger Bands is:
   - a) 1
   - b) 2
   - c) 1.5
   - d) 2.5

14. What is the middle line in Bollinger Bands?
   - a) 50-day Moving Average
   - b) 100-day Moving Average
   - c) Exponential Moving Average
   - d) Simple Moving Average

15. When the price touches the upper Bollinger Band, it is often considered:
   - a) Overbought
   - b) Oversold
   - c) In a downtrend
   - d) In a flat trend

16. Bollinger Bands are most effective when:
   - a) The market is trending strongly
   - b) The market is in a range
   - c) The market is highly volatile
   - d) The market is stagnant

17. A "Bollinger Squeeze" indicates:
   - a) A potential breakout
   - b) Market exhaustion
   - c) A continuation of the trend
   - d) A reversal

18. Bollinger Bands widen when:
   - a) The market is less volatile
   - b) The market is more volatile
   - c) Volume decreases
   - d) Volume increases

Fibonacci Retracement

19. Which of the following are common Fibonacci retracement levels?
   - a) 10%, 20%, 50%
   - b) 23.6%, 38.2%, 61.8%
   - c) 25%, 50%, 75%
   - d) 15%, 30%, 45%

20. Fibonacci retracement levels are used to:
   - a) Identify trend direction
   - b) Identify support and resistance levels
   - c) Measure market volume
   - d) Calculate moving averages

21. What is the most commonly used Fibonacci retracement level that indicates a potential deep correction?
   - a) 23.6%
   - b) 50%
   - c) 61.8%
   - d) 76.4%

22. Fibonacci levels are derived from the Fibonacci sequence, where each number is the sum of:
   - a) Two preceding numbers
   - b) Three preceding numbers
   - c) Four preceding numbers
   - d) The current price and previous price

23. When drawing Fibonacci retracement on a downtrend, you start from the:
   - a) Lowest point to highest point
   - b) Highest point to lowest point
   - c) Middle point of the trend
   - d) End of the trend

24. A reversal from the 38.2% Fibonacci retracement level suggests:
  - a) A shallow pullback
  - b) A deep correction
  - c) A strong breakout
  - d) A continuation of the trend

25. What combination of technical tools works best with Fibonacci retracement for confirmation?
  - a) Bollinger Bands
  - b) Moving Averages
  - c) MACD and RSI
  - d) Volume analysis