



MMTA Course Five – Review of Geocosmics and Cycles Plus Price Objective Calculations



MOVING AVERAGES' APPLICATION AS TREND ANALYSIS INDICATORS IN LONG-TERM CYCLES

Module Lesson Seven



Disclaimer and Appropriate Use of Course Information: The content and instruction made throughout this course are provided solely for reference and educational purposes to students, traders, and analysts (Participants).

By participating in this course, you agree that all trading or investment decisions made by Participant are at the sole risk to the Participant and Participant assumes all responsibility for any and all decisions made in financial markets.

By taking this course, you also acknowledge that trading in financial markets involves risk of loss as well as the potential for gains. As a student, trader, or investor, you agree to assume all responsibility for any and all actions you initiate in financial markets, and neither the authors, instructors, or publishers affiliated with this course, or anyone whose work is cited or referenced in the course, assumes any liability whatsoever for your decisions.

Futures or options trading are considered high risk. Information provided in the MMTA course or MMA publications is provided with sincere intent, and according to MMA's own proprietary and copyrighted processes and methodologies. All content and information provided is the intellectual property of MMA and MMTA developed by Raymond Merriman and his 40+ years of experience, observation, and research. Students may use this material responsibly and solely for their own trading and investment planning. They may cite brief sections of these studies with proper credit to MMA or MMTA. However, any other reproduction or use of this copyrighted material must be with the written consent of MMA.

The purpose of this lesson is to:

- Determine long-term support and resistance areas with moving averages
- How to identify market trends with MAs

In this lesson, you will review
and learn the following:

Appropriate MAs for long-term support and resistance

Cycles-based MA combinations

APPROPRIATE MOVING AVERAGES TO DETERMINE LONG-TERM SUPPORT OR RESISTANCE

Utilize MA that is half the length of the cycle

Acts as support for bullish cycle, unless penetrated, at which point, it becomes resistance and indicates cycle likely peaked

Acts as resistance for bearish cycle, unless penetrated, at which point, it becomes support and indicates cycle likely bottomed

APPROPRIATE MOVING AVERAGES TO DETERMINE LONG-TERM SUPPORT OR RESISTANCE

- For U.S. Stocks, a 108-month MA is used for 18-year cycle
 - 18-year cycle = 216 months
 - $\frac{1}{2}$ of 216 months = 108 months
-
- A 36-month cycle is used for 6-year cycle
 - 6-year cycle = 72 months
 - $\frac{1}{2}$ of 72 months = 36 months

The chart that follows depicts the 6-year cycle via the 36-month moving average



CYCLES-BASED MOVING AVERAGE COMBINATIONS USED TO IDENTIFY LONG- TERM CYCLE TRENDS

- Utilize one MA that is half the length of the longest cycle being analyzed
- Use a second MA that is half the length of either two-phase or three-phase sub-cycle within greater cycle
- In cases where two- and three-phase sub-cycles are used, use three moving averages, one that is half cycle length, and one that is one-third of cycle length

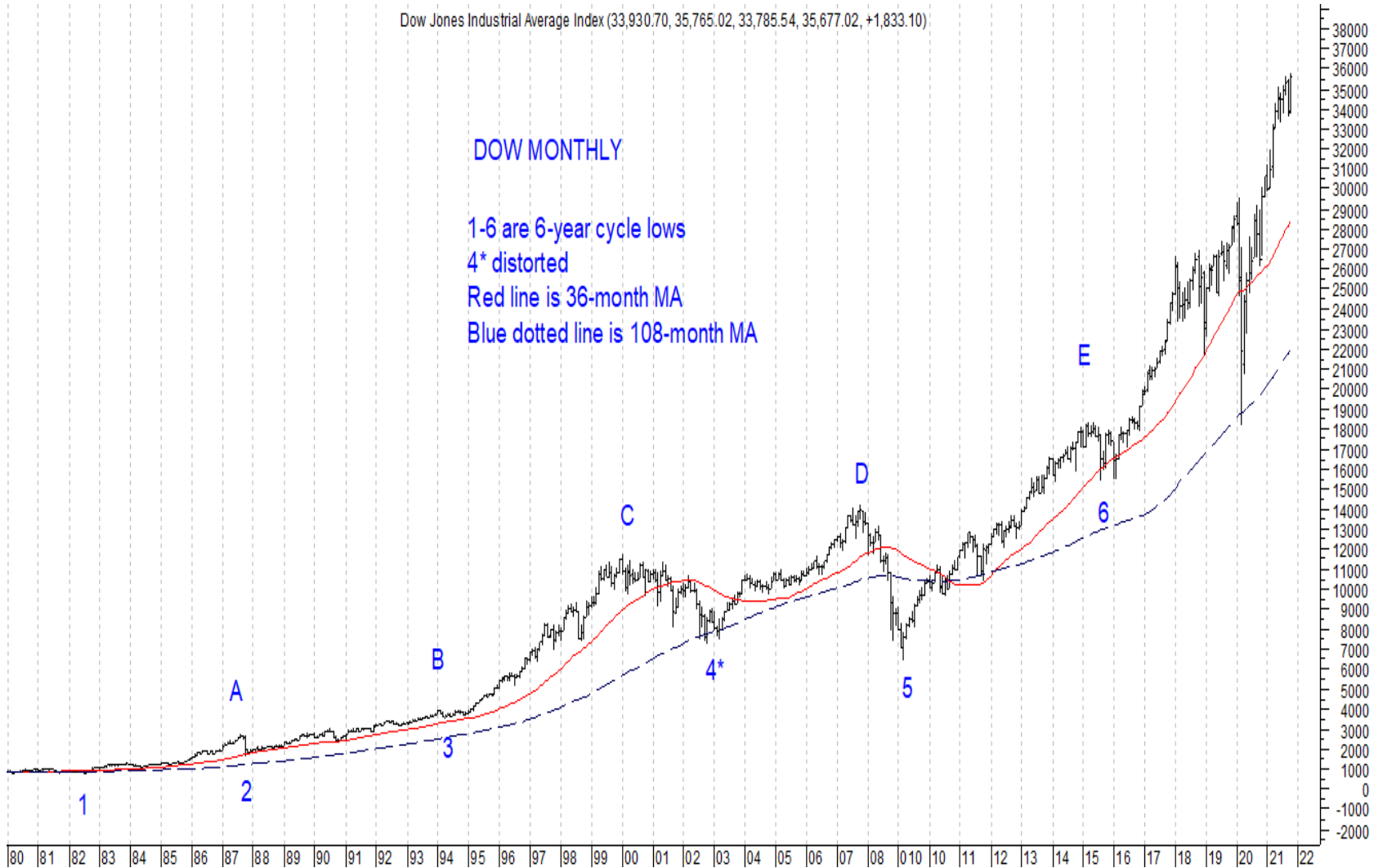
CYCLES-BASED MOVING AVERAGE COMBINATIONS USED TO IDENTIFY LONG-TERM CYCLE TRENDS

- When faster MA is above slower MA, long-term cycle is bullish, unless price is below start of greater cycle
- When faster MA is below slower MA, long-term cycle is bearish, unless market making new highs within greater cycle
- When end phase of greater cycle unfolding, not uncommon to see MAs coil, or get close together. Trend can change when shorter MA begins widening distance from slower MA

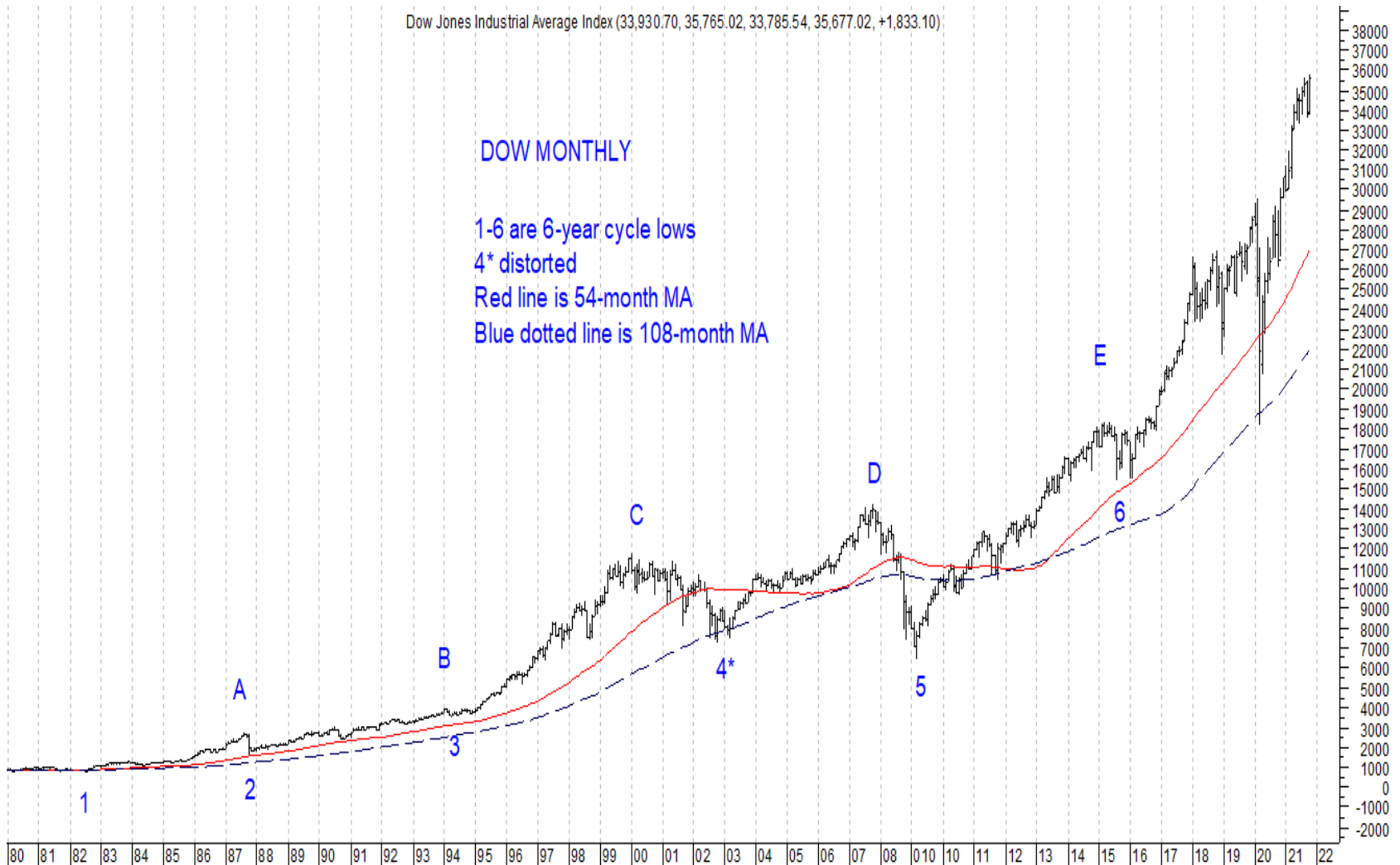
EXAMPLE: THE TREND OF THE 18-YEAR STOCK MARKET CYCLE

- 18-year cycle comprised of two 9-year cycles, three 6-year cycles, or combo of each
- Start study with MA half of 18-year cycle (108 months)
- Continue study with the MAs from other phases (36-months and 54-months)
- Charts on subsequent slides display these moving averages

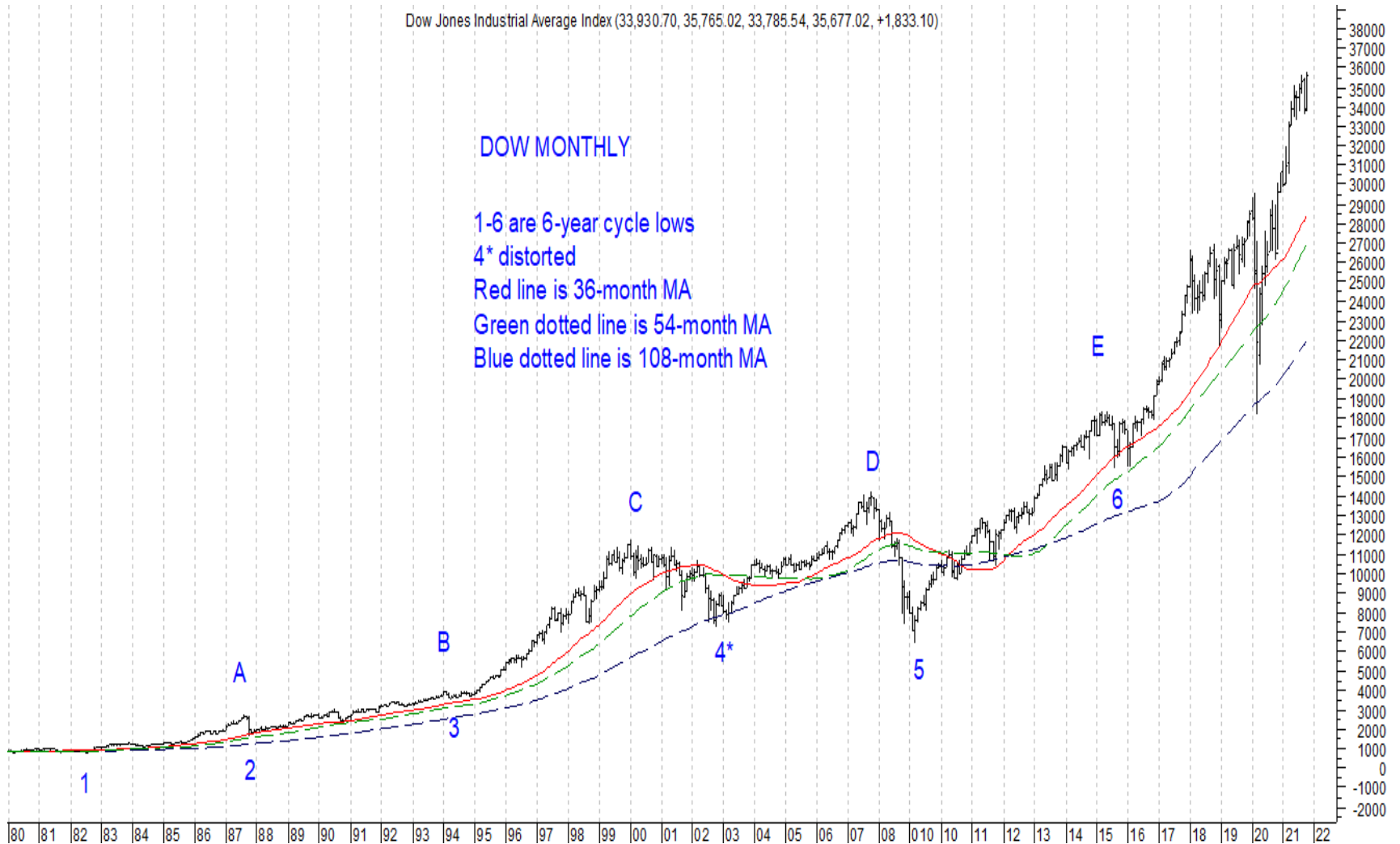
EXAMPLE: THE TREND OF THE 18-YEAR STOCK MARKET CYCLE



EXAMPLE: THE TREND OF THE 18-YEAR STOCK MARKET CYCLE



EXAMPLE: THE TREND OF THE 18-YEAR STOCK MARKET CYCLE



LESSONS FROM THE STUDY OF MULTIPLE LONG-TERM MOVING AVERAGES

- Why sell stocks if long-term MAs show that buy and hold works?
- Bull markets take the escalator up, bear markets take elevator down
- History shows that steepest declines happen in short periods
- By the time market drops 50-90%, MAs just start to turn, they lag
- Between January 2000 and October 2002, 36- and 54- MAs never fell below 108-month MA

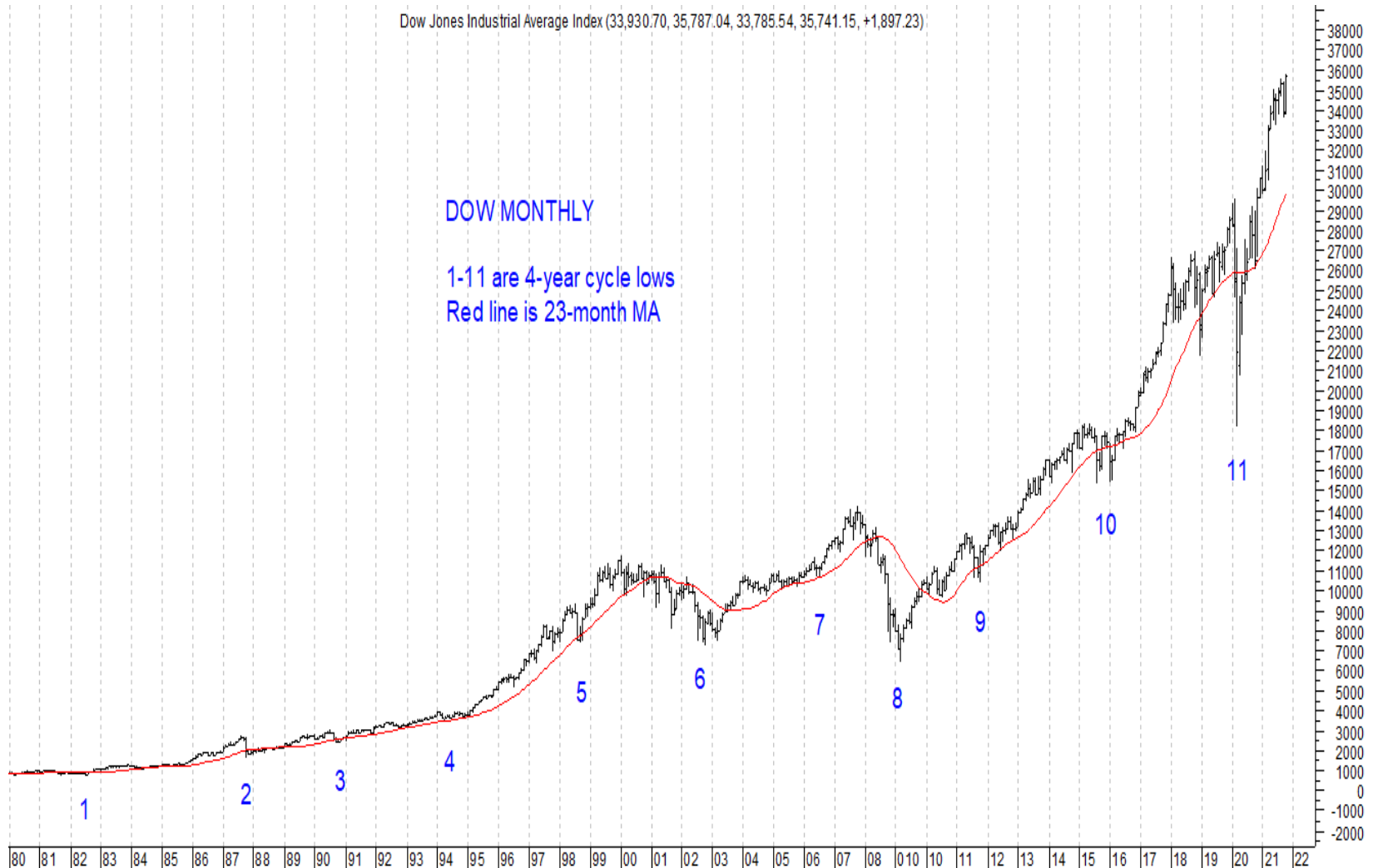
LESSONS FROM THE STUDY OF MULTIPLE LONG-TERM MOVING AVERAGES

- Between January 2000 and October 2002, 36- and 54- MAs never fell below 108-month MA
- During 54% drop from October 2007 to March 2009, 36-month MA did cross 108-month MA, but market already bottomed
- Can make money faster on right side of bear market
- Or be very patient on the long side

EXAMPLE: THE TREND OF THE 4- AND 6-YEAR CYCLES VIA MOVING AVERAGE STUDIES

- Most investors do not buy and hold based on 18-year cycle
- More are comfortable with 4-year or 6-year cycles
- We've already seen the strength of 36-month MA (tracks 6-year cycle)
- Can apply the 23-month MA for the 4-year cycle
- Chart on next slide

EXAMPLE: THE TREND OF THE 4- AND 6-YEAR CYCLES VIA MOVING AVERAGE STUDIES



EXAMPLE: THE TREND OF THE 4- AND 6-YEAR CYCLES VIA MOVING AVERAGE STUDIES



EXAMPLE: THE TREND OF THE 4- AND 6-YEAR CYCLES VIA MOVING AVERAGE STUDIES



TABLE OF MOVING AVERAGE CALCULATIONS

Cycle Length	2-Phase Sub-cycles	3-Phase Sub-cycles	Cycle Length	First MA	Second MA*	Second or Third MA*
Years	1/2 Cycle in yrs or mos	1/3 Cycle in yrs or mos	Months (mos)	1/2 Cycle in months	1/2 Longest MA (mos)	1/3 Longest MA (mos)
18	9 yrs	6 yrs	216	108	54	36
9	4.5 yrs	3 yrs	108	54	27	18
6	3 yrs	2 yrs	72	36	18	12
4	22.5 mos	15.33 mos	46	23	12	
*must also equal one-half of a 2-phase or 3-phase sub-cycle of that cycle						

QUIZ #7

MOVING AVERAGES' APPLICATION AS TREND ANALYSIS INDICATORS IN LONG-TERM CYCLES

1. What is the general rule for cycle analysis regarding which moving averages to use?
2. What does it mean in a bullish cycle when prices break below a moving average based on cycle lengths?
3. What is the most optimal moving average used to monitor the 18-year stock market cycle? What is the second optimal moving average to use in the analysis of the 18-year cycle trend?

4. True or False: When two moving averages are used to monitor the trend of a cycle, it is best to use a moving average that is half the greater cycle's length, and one that is half the length of one of its phases.

5. When monitoring the trend of 4- and/or 6-year cycles, we like to use a 23-month and 36-month moving average. Give four signals that we use to determine trend, support, or resistance that relate to this pair of moving averages.

End of Lesson 7

Break