

1. An index computed from a simple average of returns is a/an _____.

- A. equal weighted index
- B. value weighted index
- C. price weighted index
- D. share weighted index

2. You decide to purchase an equal number of shares of stocks of firms to create a portfolio. If you wished to construct an index to track your portfolio performance your best match for your portfolio would be to construct a/an _____.

- A. value weighted index
- B. equal weighted index
- C. price weighted index
- D. bond price index

3. A benchmark market value index is comprised of three stocks. Yesterday the three stocks were priced at \$12, \$20, and \$60. The number of outstanding shares for each is 600,000 shares, 500,000 shares, and 200,000 shares, respectively. If the stock prices changed to \$16, \$18, and \$62 today respectively, what is the one day rate of return on the index?

- A. 5.78%
- B. 4.35%
- C. 6.16%
- D. 7.42%

$$\text{Index yesterday} = \$12(100) + \$20(500) + \$60(200) = \$29,200 \div \$29,200 = 100$$

$$\text{Index today} = \$16(100) + \$18(500) + \$62(200) = \$31,000 \div \$29,200 = 106.16$$

$$\text{Return} = \frac{106.16}{100} - 1 = 0.0616$$

4. A benchmark index has three stocks priced at \$23, \$43, and \$56. The number of outstanding shares for each is 350,000 shares, 405,000 shares, and 553,000 shares, respectively. If the market value weighted index was 970 yesterday and the prices changed to \$23, \$41, and \$58, what is the new index value?

- A. 960
- B. 970
- C. 975
- D. 985

$$\text{MV yesterday} = \$23(350) + \$43(405) + \$56(553) = \$56,433$$

$$\text{MV today} = \$23(350) + \$41(405) + \$58(553) = \$56,729$$

$$\frac{\text{MV today}}{\text{MV yesterday}} = \frac{\text{Index today}}{\text{Index yesterday}}$$

$$\Rightarrow \text{Index today} = \frac{\text{MV today}}{\text{MV yesterday}} \times \text{Index yesterday} = \frac{\$56,729}{\$56,433} (970) = 975.08$$

5. Three stocks have share prices of \$12, \$75, and \$30 with total market values of \$400 million, \$350 million and \$150 million respectively. If you were to construct a price-weighted index of the three stocks what would be the index value?

- A. 300
- B. 39
- C. 43
- D. 30

$$\text{Price Index} = \frac{12 + 75 + 30}{3} = 39$$

6. In a _____ index changes in the value of the stock with the greatest market value will move the index value the most everything else equal.

- A. value weighted index
- B. equal weighted index
- C. price weighted index
- D. bond price index

7. The Standard and Poors 500 is a(n) _____ weighted index.

- A. equally
- B. price
- C. value
- D. share

8. The Hydro Index is a price weighted stock index based on the 5 largest boat manufacturers in the nation. The stock prices for the five stocks are \$10, \$20, \$80, \$50 and \$40. The price of the last stock was just split 2 for 1 and the stock price was halved from \$40 to \$20. What is the new divisor for a price weighted index?

- A. 5.00
- B. 4.85
- C. 4.50
- D. 4.75

$$\text{Old Index} = \frac{10 + 20 + 80 + 50 + 40}{5} = 40$$

Solve for new divisor :

$$\frac{10 + 20 + 80 + 50 + 40}{x} = 40$$

$$\frac{180}{x} = 40$$

$$x = \frac{180}{40} = 4.5$$

9. The Chompers Index is a price weighted stock index based on the 3 largest fast food chains. The stock prices for the three stocks are \$54, \$23, and \$44. What is the price weighted index value of the Chompers Index?

- A. 23.43
- B. 35.36
- C. 40.33
- D. 49.58

$$\text{Price Index} = \frac{54 + 23 + 44}{3} = 40.33$$