

MAT112 pre-final Quiz

25 Questions

1. Suppose you deposit \$2000 in a bank account that pays 6% interest compounded quarterly. How much money will you have after 2 years?
- 4/7 A \$2,185.43
- 2/7 B \$2,253.62
- 0/7 C \$2,520.10
- 1/7 D \$2,112.00
2. Suppose you invest \$5000 at 4% compounded semiannually for 3 years. What will be the future value?
- 5/7 A \$5,630.81
- 1/7 B \$5,412.16
- 0/7 C \$5,210.00
- 1/7 D \$6,001.45
3. Suppose you deposit £3500 into an account earning 5% compounded annually. How much will the account contain after 4 years?
- 4/6 A £4,083.23
- 0/6 B £4,255.47
- 0/6 C £4,600.00
- 2/6 D £3,920.10

4. Suppose you invest
1200
at
8%
compounded monthly for
5
years. What is the approximate balance?

3/6 A \$1,785.52

0/6 B \$1,400.00

1/6 C \$1,620.45

2/6 D \$2,005.18

5. Suppose you deposit
€7000
at
3.6%
compounded quarterly for
6
years. What will be the final amount?

3/6 A €8,190.55

1/6 B €8,410.20

0/6 C €9,000.00

2/6 D €7,756.00

6. Suppose you invest
10000
at
7%
compounded semiannually for
2
years. How much will you have at the end?

4/6 A \$11,225.00

0/6 B \$11,476.25

0/6 C \$10,980.50

2/6 D \$12,000.00

7. Suppose you deposit
4500
in a savings account paying
2.5%
compounded monthly for
3
years. What is the future value?

2/6 **A** \$4,850.32

1/6 **B** \$4,657.20

1/6 **C** \$5,020.11

2/6 **D** \$4,500.00

8. Suppose you invest
6000
at
9%
compounded quarterly for
4
years. How much money will you have?

4/6 **A** \$8,570.41

1/6 **B** \$7,200.00

0/6 **C** \$8,136.22

1/6 **D** \$9,010.00

9. Suppose you deposit
2800
at
4.5%
compounded annually for
5
years. What will be the balance?

3/6 **A** \$3,488.75

0/6 **B** \$3,201.44

2/6 **C** \$3,120.00

1/6 **D** \$4,000.00

10. Suppose you invest 9000 at 6.4% compounded monthly for 7 years. What is the approximate future value?

- 4/6 A \$12,339.60
- 0/6 B \$13,980.15
- 0/6 C \$11,200.45
- 2/6 D \$10,500.00

11. A company's yearly profit increases from £80,000 to £92,000. What is the percentage increase in profit?

- 4/6 A 10%
- 0/6 B 12%
- 1/6 C 15%
- 1/6 D 18%

12. The government imposes a 20% tax on a product. How much will consumers pay for an item priced at £750 before tax?

- 3/6 A £850
- 2/6 B £900
- 1/6 C £875
- 0/6 D £820

13. A house decreases in value by 9% over one year. If the house was originally worth £240,000, what is its value at the end of the year?

- 3/6 A £220,400
- 1/6 B £218,400
- 1/6 C £225,000
- 1/6 D £210,000

- 14.** A store increases the price of a laptop from £1,200 to £1,380. What is the percentage increase in price?
- 4/6 **A** 12%
- 1/6 **B** 15%
- 1/6 **C** 18%
- 0/6 **D** 20%
- 15.** A savings account loses 5% of its value due to bank charges and inflation. If the balance was originally £6,400, what is the remaining amount?
- 3/6 **A** £6,000
- 1/6 **B** £6,080
- 2/6 **C** £5,950
- 0/6 **D** £5,700
- 16.** If the annual inflation rate is 6%, what will be the price of a product at the end of the year if its original price is £80?
- 2/6 **A** £82.50
- 3/6 **B** £84.80
- 1/6 **C** £86.00
- 0/6 **D** £88.20
- 17.** The price of a television is £1,440 including a 20% sales tax. What is the original price before tax?
- 4/6 **A** £1,100
- 1/6 **B** £1,200
- 1/6 **C** £1,250
- 0/6 **D** £1,300
- 18.** Express the increase from 1,250 to 1,400 as a percentage.
- 3/6 **A** 10%
- 1/6 **B** 12%
- 1/6 **C** 15%
- 1/6 **D** 18%

- 19.** A product's price rises by 8% over one year. If the original price was £350, what is the new price?
- 5/6 **A** £372
- 0/6 **B** £376
- 1/6 **C** £380
- 0/6 **D** £388
- 20.** A laptop costs £960 including a 25% VAT. What is the price before VAT?
- 3/6 **A** £720
- 0/6 **B** £750
- 3/6 **C** £768
- 0/6 **D** £800
- 21.** The value of a house decreases by 18% in one year. If the house is currently worth £250000, what will it be worth after one year?
- 4/6 **A** 200000
- 1/6 **B** 205000
- 1/6 **C** 215000
- 0/6 **D** 225000
- 22.** After a 25% discount, the price of a jacket becomes £72. What was the original price before the discount?
- 3/6 **A** 84
- 2/6 **B** 90
- 1/6 **C** 96
- 0/6 **D** 100
- 23.** The number of students enrolled in a course fell from 4800 to 4320. What is the percentage decrease?
- 4/6 **A** 8%
- 0/6 **B** 10%
- 1/6 **C** 12%
- 1/6 **D** 15%

24. A company's annual sales decreased by 12%. If sales were originally 850000 , what are the new sales figures?

3/6 **A** 748000

0/6 **B** 765000

2/6 **C** 770000

1/6 **D** 780000

25. After a 30% reduction during a clearance sale, a sofa costs £560. What was the original price before reduction?

4/6 **A** 700

2/6 **B** 750

0/6 **C** 800

0/6 **D** 840