

# Math for Business pre-final exam Quiz

30  
Questions

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1. What fraction represents 25%?

40/41 **A** 1/4

0/41 **B** 1/5

1/41 **C** 25/10

0/41 **D** 5/4

2. 20% of £1000 equals,

38/41 **A** £200

0/41 **B** £20

3/41 **C** £800

0/41 **D** £1200

3. If a price increases by 12%, the appropriate scale factor is:

23/40 **A** 0.12

14/40 **B** 1.12

0/40 **C** 1.2

3/40 **D** 0.88

4. A good originally priced at £78 rises by 9%. The new price is:

2/40 **A** £87

37/40 **B** £85.02

1/40 **C** £70.98

0/40 **D** £1068

**5.** To calculate the original price from a final price after a 9% rise, you should:

**16/39**  A Multiply by 1.09

**23/39**  B Divide by 1.09

**0/39**  C Subtract 9

**0/39**  D Add 9

**6.** Which of the following represents a 20% decrease?

**13/39**  A Scale factor 1.20

**1/39**  B Scale factor 1.80

**1/39**  C Scale factor 20

**24/39**  D Scale factor 0.80

**7.** If an investment depreciates by 25% in a year, its value next year will be:

**5/38**  A 1.25 times original

**4/38**  B 25% of original

**28/38**  C 0.75 times original

**1/38**  D 1.75 times original

**8.** Marginal propensity to save (MPS) plus marginal propensity to consume (MPC) equals:

**4/38**  A 0

**33/38**  B 1

**1/38**  C MPC

**0/38**  D MPS

**9.** Which of the following is correct for MPC?

**27/38**  A  $0 < \text{MPC} < 1$

**0/38**  B  $\text{MPC} < 0$

**1/38**  C  $\text{MPC} > 1$

**10/38**  D  $\text{MPC} = 1$

**10.** Which formula gives simple interest?

**22/38**  A  $P(1+r)^n$

**14/38**  B  $\text{Prt}$

**1/38**  C  $\text{Pe}^{rt}$

**1/38**  D  $P+r$

**11.** Calculate simple interest on \$500 at 10% for 6 months.

**29/38** **A** \$25

**7/38** **B** \$50

**2/38** **C** \$500

**0/38** **D** \$5

**12.** A loan of \$800 at 9% for 4 months gives interest of:

**33/38** **A** \$24

**1/38** **B** \$9

**1/38** **C** \$27

**3/38** **D** \$80

**13.** Compound interest occurs when:

**2/38** **A** Interest is paid only once

**30/38** **B** Interest earns further interest

**4/38** **C** Prices decrease

**2/38** **D** Taxes are removed

**14.** \$1,000 invested at 8% compounded quarterly for 1 year becomes approximately:

**5/38** **A** \$1,020

**21/38** **B** \$1,082

**12/38** **C** \$1,080

**0/38** **D** \$800

**15.** The amount after 5 years for discrete compounding is calculated by:

**1/38** **A** Simple interest

**35/38** **B**  $P(1+r)^n$

**0/38** **C**  $P/(1+r)^n$

**2/38** **D**  $Prn$

**16.** If \$2,000 is borrowed at 12% compounded annually for 2 years, the total amount due is:

**0/37** **A**  $2000 \times 1.12$

**35/37** **B**  $2000 \times 1.12^2$

**0/37** **C**  $2000 \times 0.12$

**2/37** **D**  $2000 \times 2$

**17.** The index number in the base year is always:

**3/37**  A Equal to inflation

**26/37**  B Set to 100

**5/37**  C Set to MPC

**3/37**  D Negative

**18.** Household spending rises from 697.2 to 723.7. The index number (base 697.2) is approximately:

**4/37**  A 98.5

**25/37**  B 103.8

**2/37**  C 100

**6/37**  D 105.3

**19.** Nominal data refer to:

**8/37**  A Inflation-adjusted values

**5/37**  B Real GDP only

**2/37**  C Discounted values

**22/37**  D Raw values at prevailing prices

**20.** Real data are obtained from nominal values by:

**5/36**  A Adding inflation

**23/36**  B Dividing by appropriate scale factors

**2/36**  C Ignoring inflation

**6/36**  D Multiplying by MPC

**21.** The value of 1007 compared to 950 represents approximately:

**1/36**  A 12% rise

**9/36**  B 5% decrease

**1/36**  C 8% decrease

**25/36**  D 6% rise

**22.** A \$10,000 T-bill bought for \$9,693.78 for 180 days yields annual rate of approximately:

**1/36**  A 12%

**22/36**  B 7%

**11/36**  C 3.5%

**2/36**  D 9%

**23.** Continuous compounding uses the formula:

10/36 A  $P(1+r)^n$

0/36 B  $Prt$

10/36 C  $FV/(1+r)^n$

16/36 D  $Pe^{rt}$

**24.** £1,000 invested at 12% continuously compounded for 2 years is:

8/36 A  $1000 \times 1.12^2$

19/36 B  $1000e^{0.12 \times 2}$

7/36 C  $1000/(1.12)^2$

2/36 D  $1000 \times 0.12 \times 2$

**25.** To move backward in time with inflation adjustments, you should:

6/36 A Multiply by scale factor

22/36 B Divide by scale factor

8/36 C Add inflation rate

0/36 D Ignore brackets

**26.** Which basket is used for calculating annual inflation?

7/36 A Nominal basket

23/36 B Goods and services reflecting household patterns

6/36 C MPC basket

0/36 D Only luxury goods

**27.** If a firm plans to repay £500 in 5 years and the discount rate is 6% compounded semi-annually, the present value is about:

3/35 A £500

21/35 B £373

8/35 C £370

3/35 D £464

**28.** A car priced at £43,000 depreciates by 25%. Next year it will be worth:

**2/35**  A £10,750

**29/35**  B £32,250

**2/35**  C £47,000

**2/35**  D £60,800

**29.** Overall percentage change after successive increases of 32% and 10% is found by:

**5/35**  A Adding 42%

**2/35**  B Subtracting 10

**5/35**  C Using simple interest

**23/35**  D Multiplying 1.32 and 1.1

**30.** If inflation is 10.7% in 1992, nominal price £93,000 adjusted to 1991 prices is approximately:

**6/35**  A  $93,000 \times 1.071$

**24/35**  B  $93,000 / 1.071$

**4/35**  C  $93,000 \times 0.12$

**1/35**  D  $93,000 / 0.12$