PRAKTIS 3

Matematik Pengguna: Simpanan dan Pelaburan, Kredit dan Hutang
Consumer Mathematics: Savings and Investments, Credit and Debt

Nota Progresif

Simpanan dan Pelaburan/*Savings and Investments*

Jenis simpanan/*Types of savings*
- Akaun simpanan/*Saving account*
- Akaun semasa/*Current account*
- Akaun simpanan tetap/*Fixed deposit account*

Faedah mudah/*Simple interest*

$$I = Prt$$

I = Faedah/*Interest*; P = Prinsipal/*Principal*; r = Kadar faedah/*Interest rate*; t = Masa (tahun)/*Time (year)*

Faedah kompaun/*Compound interest*

$$MV = P\left(1 + \frac{r}{n}\right)^{nt}$$

MV = Nilai matang/*Matured value*; P = Prinsipal/*Principal*; r = Kadar faedah tahunan/*Yearly interest rate*; n = Bilangan faedah dikompaun dalam setahun/*Number of periods the interest rate is compounded per year*; t = Tempoh dalam tahun/*Term in years*

Jenis pelaburan/*Types of investment*
- Amanah saham/*Unit trust*
- Hartanah/*Real estate*
- Saham/*Shares*

Nilai pulangan pelaburan/*Return on investment* (ROI)

$$\text{ROI} = \frac{\begin{array}{c}\text{Jumlah pulangan}\\ \textit{Total return}\end{array}}{\begin{array}{c}\text{Nilai pelaburan awal}\\ \textit{Value of initial investment}\end{array}} \times 100\%$$

Kredit dan Hutang/*Credit and debt*

Kad kredit/*Credit card*

Kelebihan/*Advantages*	Keburukan/*Disadvantages*
• Tanpa tunai/*Cashless* • Sistem ganjaran/*Rewards system* • Mudah membeli barangan dan perkhidmatan atas talian *Convenience of buying goods and services online* • Kedah pembayaran mudah dan cekap *Easy and efficient payment method*	• Sesetengah kedai tidak menerima pembayaran melalui kad kredit *Some stores do not accept credit payment* • Berbelanja lebih daripada sepatutnya/*Overspending* • Perlu membayar pelbagai caj dan faedah *Incur charges and interest*

Rumus faedah kadar sama rata/*Flat interest rate formula*

$$A = P + Prt$$

A = Jumlah bayaran balik/*Total repayment*; P = Prinsipal/*Principal*; r = Kadar faedah/*Interest rate*; t = Masa (tahun)/*Time (year)*

Bahagian A

3.1 Simpanan dan Pelaburan
Savings and Investments

1 Antara berikut yang manakah adalah pelaburan?
Which of the following is a type of investment?

A Akaun simpanan
Savings account

B Akaun semasa
Current account

C Akaun simpanan tetap
Fixed deposit account

D Amanah saham
Unit Trust

2 Antara berikut, yang manakah merupakan simpanan?
Which of the following is a type of savings?

A Hartanah
Real estate

B Emas
Gold

C Saham
Shares

D Akaun simpanan tetap
Fixed deposit account

3 Zakaria mahu mendapatkan pulangan yang tinggi tetapi risiko rendah daripada pelaburannya. Antara pelaburan berikut, yang manakah harus dipilihnya?
Zakaria wants to get a high return but low risk from his investment. Which of the following investments should be chosen by him?

A Emas *Gold*
B Amanah saham *Unit Trust*
C Hartanah *Real estate*
D Saham *Shares*

4 James menyimpan RM15 000 ke dalam Bank Mesra dengan kadar faedah mudah 2.0% setahun. Hitung jumlah simpanannya selepas 3 tahun.
James deposited RM15 000 in Mesra Bank with simple interest rate of 2.0% per annum. Calculate his total savings after 3 years.

A RM900
B RM15 300
C RM15 900
D RM15 918.12

5 Hui Thing menyimpan sejumlah wang di sebuah bank. Selepas 4 tahun, jumlah simpanannya menjadi RM8 800. Jika kadar faedah mudah ialah 2.5% setahun, cari jumlah wang yang disimpan pada awalnya.
Hui Thing saves a sum of money in a bank. After 4 years, her total saving becomes RM8 800. If the simple interest rate is 2.5% annually, find the sum of money he saved in the beginning.

A RM7 972.37
B RM8 000
C RM8 200
D RM8 585.37

6 Antara simpanan atau pelaburan berikut, yang manakah mempunyai risiko paling tinggi?
Which of the following savings or investments has the highest risk?

A Amanah saham *Unit trust*
B Simpanan tetap *Fixed deposit*
C Hartanah *Real estate*
D Saham *Shares*

7 Farid membeli 10 000 unit syer Syarikat Tenaga Gagah yang bernilai RM1 seunit pada harga pasaran RM5.00 seunit. Selepas pembelian itu, syarikat itu mengisytiharkan dividen 8 sen per unit. Hitung jumlah dividen yang diterima oleh Farid.
Farid bought 10 000 units of Syarikat Tenaga Gagah's shares valued at RM1 per unit at a market price of RM5.00 per unit. After the purchase, the company declared an 8 cent per unit dividend. Calculate the total amount of dividend that Farid received.

A RM80
B RM400
C RM800
D RM4 000

8 KBAT Pada 1 Januari 2024, Mustafa menyimpan RM5 000 dalam akaun simpanan di bank Islam. Menjelang akhir tahun ini, beliau menerima 2.4% daripada purata keuntungan dan bonus tambahan atau Hibah RM80 untuk jumlah yang disimpannya. Apakah jumlah simpanannya pada akhir tahun ini?
On 1 January 2024, Mustafa saved RM5 000 in a savings account in an Islamic bank. By the end of the year, he received a 2.4% of an average profit and addition bonus or hibah of RM80 for the sum he deposited. What is his total savings at the end of the year?

A RM200
B RM8 080
C RM8 120
D RM8 200

9 Cari jumlah simpanan jika RM15 000 disimpan dalam bank selama 5 tahun pada kadar faedah 4% setahun dan pengkompaunan setiap setengah tahun.
Find the the total savings if RM15 000 *is invested in a bank for* 5 *years with an interest rate of* 4% *per annum and compounded half yearly.*
A RM18 000
B RM18 249.79
C RM18 284.92
D RM19 000

10 Syarikat Murni yang harga sahamnya RM8.50 seunit telah mengisytiharkan dividen sebanyak RM0.50 seunit kepada pemegang saham mereka. Berapakah jumlah dividen yang diperoleh Encik Wee yang membeli 12 000 unit saham syarikat itu?
Company Murni with a share price of RM8.50 *per unit has declared a dividend of* RM0.50 *per unit to its stockholders. How much dividend obtained by Encik Wee who bought* 12 000 *units of shares of the company?*
A RM4 250
B RM6 000
C RM8 500
D RM51 000

3.2 Pengurusan Kredit dan Hutang
Credit and Debt Management

11 Darren membeli sebuah kereta bernilai
KBAT RM85 000 secara kredit. Beliau membayar bayaran pendahuluan sebanyak 10% dan bakinya dibayar secara ansuran selama 6 tahun. Kadar faedah mudah yang dikenakan oleh bank ialah 3.5% setahun. Berapakah bayaran ansuran bulanan yang perlu dibayar oleh Darren?
Darren bought a car worth RM85 000 *on credit. He paid a* 10% *down payment and the balance is paid in instalments for* 6 *years. The bank's simple interest rate is* 3.5% *per annum. What is the monthly instalment that Darren has to pay?*
A RM1 062.50
B RM1 285.63
C RM1 310.42
D RM1 428.47

12 Aminah ingin membeli komputer riba baru dengan harga RM4 800. Dia membayar bayaran pendahuluan RM800 menggunakan kad kredit dan baki dibayar dalam 30 ansuran bulanan dengan kadar faedah 4.5% setahun. Berapakah ansuran bulanannya?
Aminah wants to buy a new laptop at a price of RM4 800. *She pays the down payment* RM800 *using her credit card and the balance is paid in* 30 *monthly instalments with an interest rate of* 4.5% *per annum. How much is her monthly instalment?*
A RM58.06
B RM148.33
C RM167.20
D RM178.00

13 Antara berikut, yang manakah adalah kelebihan kad kredit?
Which of the following is the advantage of credit card?
A Kenakan yuran tahunan
Impose annual fee
B Perbelanjaan tidak disiplin
Indiscipline expenses
C Faedah yang tinggi atas baki tertunggak
High interest on outstanding balance
D Pelan ansuran tanpa faedah
Instalment plan without interest

14 Ibrahim membeli sebuah rumah dengan membuat pinjaman sebanyak RM100 000. Tempoh pinjaman ialah 20 tahun dan Ibrahim membayar ansuran bulanan sebanyak RM708.33. Berapakah kadar faedah pinjaman itu?
Ibrahim bought a house with a loan of RM100 000. *The loan term is* 20 *years and Ibrahim pays a monthly instalment of* RM708.33. *What is the loan interest rate?*
A 3.50%
B 3.55%
C 3.60%
D 3.65%