**Assignment 5.1 De Hamer**The carpenter’s business ‘De Hamer’ has the following balance sheet on 1 January:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Balance sheet De Hamer on 1 January** | | | | **Credit** |
| property | € | 200,000 | ……………. | € | ………….. |
| van | € | 25,000 | 5% mortgage loan | € | 240,000 |
| machinery and tools | € | 100,000 | 7% bank loan | € | 30,000 |
| stock of timber and nails | € | 50,000 | creditors | € | 60,000 |
| debtors | € | 10,000 |  |  |  |
| cash | € | 3,000 |  |  |  |
| bank | € | 17,000 |  |  |  |
|  |  |  |  |  |  |
| Total | € | ……….. | Total | € | …………… |

a. Fill in the missing words and numbers.

On 2 January Piet Hamer (the owner of the business) delivers a number of window-frames to Mr Raam worth €15,000. The customer must pay within 14 days.

On the same day Piet also uses his PIN card to pay an invoice of €845 for a repair of the van at the garage.

b. Which balance sheet items change as a result of those financial transactions?

c. Fill in the statement of changes below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer**  **on 2 January** | | | | **Credit** |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
| Total | € |  | Total | € |  |

On 3 January Piet pays the interest on the mortgage loan for January. The repayment of January is also withdrawn from his bank account. Monthly repayments are made of the mortgage loan. The whole loan will be repaid in the next 40 years.

d. Calculate the interest on the mortgage loan paid in January.

e. Calculate the amount of the monthly repayment.

f. Which balance sheet items change as a result of the repayment and interest payment?

g. Fill in the statement of changes below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer**  **on 3 January** | | | | **Credit** |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
| Total | € |  | Total | € |  |

On 14 January Mr Raam pays his invoice via the bank. The wholesaler also delivers a batch of timber for an amount of €3,455. De Hamer must pay within three weeks.

h. Which balance sheet items change as a result of this transaction?

i. Fill in the statement of changes below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer**  **on 14 January** | | | | **Credit** |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
| Total | € |  | Total | € |  |

On 30 January Piet pays an energy bill amounting to €850 via the bank. In the evening Piet goes out with his wife. For this outing Piet withdraws €200 from the cash of his business.

j. Which balance sheet items change as a result of this transaction?

k. Fill in the statement of changes below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer on 30 January** | | | | **Credit** |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
| Total | € |  | Total | € |  |

l. Draw up the new balance sheet for De Hamer on 31 January

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Balance sheet De Hamer on 31 January** | | | | **Credit** |
| property | € |  | ……………. | € |  |
| van | € |  | 5% mortgage loan | € |  |
| machinery and tools | € |  | 7% bank loan | € |  |
| stock of timber and nails | € |  | creditors | € |  |
| debtors | € |  |  |  |  |
| cash | € |  |  |  |  |
| bank | € |  |  |  |  |
|  |  |  |  |  |  |
| Total | € |  | Total | € |  |

**Assignment 5.2 The balance sheet**

In the schedule below fill in the concepts in the right place and calculate the owner’s equity.

|  |  |  |  |
| --- | --- | --- | --- |
| • | Balance sheet on |  |  |
| • | Capital |  |  |
| • | 5% Loan | € | 8,000 |
| • | Assets |  |  |
| • | Debit |  |  |
| • | 8% Loan | € | 6,000 |
| • | Van | € | 15,000 |
| • | Stock | € | 8,000 |
| • | Computers | € | 7,000 |
| • | Cash | € | 3,000 |
| • | Owner’s equity | € | ………. |
| • | Credit |  |  |
| • | 1 January |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **……………** | **…………………………………………………………..** | | | | **……………** |
|  | | |  | | |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  | € |  |  | € |  |
|  |  |  |  |  |  |
| Total | € |  | Total | € |  |

**Assignment 5.3**Make an economically correct text of the sentences below.  
A balance sheet ….(1)…. . This means that a balance sheet gives an overview of the assets and the capital ….(2)…. . In the balance sheet you find so-called ….(3)…. . It concerns the value of the assets and the extent of the capital ….(4)…. .In the course of time, changes will occur in these. These changes do not disturb the equilibrium in the balance sheet.

Choose from:  
at (1) relates to a certain period / is always a snapshot in time  
at (2) in a certain period / at a certain time

at (3) stock quantities / flow quantities

at (4) at a certain moment / in a certain period.

**Assignment 5.4**

Taxi firm Vanhouten has made the following expectations for January:

|  |  |
| --- | --- |
| • | Number of taxi kilometres: 36,000 km, of which 60% with customers and 40% without customers. |
| • | The average diesel consumption is 1 litre to 12 kilometres. The average price of diesel is €1.45 per litre. |
| • | The maintenance costs of the cars are estimated at €16,800 per year. |
| • | The taxi firm owns 3 cars, with a total purchase price of €129,600. The cars are fully depreciated in three years. |
| • | The taxi firm leases business premises at €1,800 per month. |
| • | The taxi firm has three drivers and a receptionist in its employ. The total wage costs amount to €14,370 per month. |
| • | The costs for gas, water and electricity are estimated at €920 per month. |
| • | The telephone costs are estimated at €1,600 per month. |
| • | The other costs are estimated at €2,200 per month. |

a. Calculate the total of the expected costs for January.

At the end of January the taxi firm has realised the following costs:

|  |  |
| --- | --- |
| • | Number of kilometres covered 34,000, of which 55% with customers and 45% without customers. |
| • | The average price of diesel was €1.50 per litre. |
| • | The maintenance costs of the cars in January were €1,600. |
| • | The other costs match the estimates. |

The rate per passenger kilometre which Vanhouten charges its customers is €2.10 per kilometre.

b. Use the above data to draw up the profit and loss account.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Costs** | **Profit and loss account Vanhouten**  **in January** | | | | **Revenues** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| balance |  |  | balance |  |  |
|  |  |  |  |  |  |

**Assignment 5.5**

Stationer’s shop De Korte buys a ream of paper (500 sheets) for €3.025 inclusive of 21% VAT. It sells this ream of paper with a profit mark-up of 50% on the selling price exclusive of VAT.  
Calculate how much a customer must pay for a ream of paper inclusive of 21% VAT.

**Computations**

**Assignment 5.1**

a.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Balance sheet De Hamer on 1 January** | | | | **Credit** |
| property | € | 200,000 | **owner’s equity** | € | **75,000** |
| van | € | 25,000 | 5% mortgage loan | € | 240,000 |
| machinery and tools | € | 100,000 | 7% bank loan | € | 30,000 |
| stock of timber and nails | € | 50,000 | creditors | € | 60,000 |
| debtors | € | 10,000 |  |  |  |
| cash | € | 3,000 |  |  |  |
| bank | € | 17,000 |  |  |  |
|  |  |  |  |  |  |
| Total | € | **405,000** | Total | € | **405,000** |

b. Debtors, owner’s equity and bank.

c.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer 2 January** | | | | | | **Credit** | |
| debtors | + | € | 15,000 | owner’s equity | + | € | | 14,155 |
| bank | ─ | € | 845 |  |  |  | |  |
|  |  |  |  |  |  |  | |  |
| total | + | € | 14,155 | total | + | € | | 14,155 |

d. 5% × 240,000/12 = €1,000.

e. 240,000/(12 × 40) = €500.

f. Bank, owner’s equity and 5% mortgage loan.

g.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer 3 January** | | | | **Credit** | | |
| bank | ─ | € | 1,500 | owner’s equity | ─ | € | 1,000 |
|  |  |  |  | 5% mortgage loan | ─ | € | 500 |
|  |  |  |  |  |  |  |  |
| total | ─ | € | 1,500 | total | ─ | € | 1,500 |

h. Debtors, bank, stock of timber and creditors.

i.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer 14 January** | | | | | | **Credit** | |
| debtors | ─ | € | 15,000 | creditors | + | € | | 3,455 |
| bank | + | € | 15,000 |  |  |  | |  |
| stock of timber and nails | + | € | 3,455 |  |  |  | |  |
| total | + | € | 3,455 | total | + | € | | 3,455 |

j. Cash, bank and owner’s equity.

k.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Debit** | **Statement of changes De Hamer 30 January** | | | | | | **Credit** | |
| bank | ─ | € | 850 | owner’s equity | ─ | € | | 1,050 |
| cash | ─ | € | 200 |  |  |  | |  |
|  |  |  |  |  |  |  | |  |
| total | ─ | € | 1,050 | total | ─ | € | | 1,050 |

l.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Balance sheet De Hamer on 31 January** | | | | **Credit** |
| property | € | 200,000 | **owner’s equity** | € | **87,105** |
| van | € | 25,000 | 5% mortgage loan | € | 239,500 |
| machinery and tools | € | 100,000 | 7% bank loan | € | 30,000 |
| stock of timber and nails | € | 53,455 | creditors | € | 63,455 |
| debtors | € | 10,000 |  |  |  |
| cash | € | 2,800 |  |  |  |
| bank | € | 28,805 |  |  |  |
|  |  |  |  |  |  |
| Total | € | **420,060** | Total | € | **420,060** |

**Assignment 5.2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Debit** | **Balance sheet on 1 January** | | | | **Credit** |
| Assets | | | **Liabilities** | | |
| Car | € | 15,000 | Owner’s equity | € | 19,000 |
| Computers | € | 7,000 | 5% Loan | € | 8,000 |
| Stock | € | 8,000 | 8% Loan | € | 6,000 |
| Cash | € | 3,000 |  | € |  |
|  | € |  |  | € |  |
|  |  |  |  |  |  |
| Total | € | **33,000** | Total | € | **33,000** |

**Assignment 5.3**

at (1) is always a snapshot in time

at (2) at a certain time

at (3) stock quantities

at (4) at a certain moment.

**Assignment 5.4**

a.

|  |  |  |  |
| --- | --- | --- | --- |
| • | Diesel: 36.000 × 1,45/12 | € | 4,350 |
| • | Maintenance costs cars | € | 1,400 |
| • | Depreciation cars (129,600/3)/12 | € | 3,600 |
| • | Lease business premises | € | 1,800 |
| • | Wage costs | € | 14,370 |
| • | Gas, water and electricity | € | 920 |
| • | Telephone costs | € | 1,600 |
| • | Other costs | € | 2,200 |
|  | Total costs per month | € | 30,240 |

b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Costs** | **Profit and loss account Vanhouten**  **in January** | | | | **Revenues** |
| diesel | € | 4,250 | Revenues (turnover) | € | 39,270 |
| maintenance costs | € | 1,600 |  |  |  |
| depreciation cars | € | 3,600 |  |  |  |
| lease business premises | € | 1,800 |  |  |  |
| wage costs | € | 14,370 |  |  |  |
| gas, water, electricity | € | 920 |  |  |  |
| telephone costs | € | 1,600 |  |  |  |
| other costs | € | 2,200 |  |  |  |
|  |  |  |  |  |  |
| net profit | € | 8,930 |  |  |  |
| Total | € | **39,270** | Total | € | **39,270** |

Diesel: 34,000 × 1.50/12 = €4,250.

Turnover: 34,000 × 0.55 × 2.10 = €39,270.

**Assignment 5.5**

Purchase price of a ream of paper exclusive of VAT = 3.025/1.21 = €2.50.  
Selling price = 100%

─ Profit mark-up = 50%

= Purchase price = 50% = 2.50.

Selling price is then 2.50 × 100/50 = €5.00.  
Selling price inclusive of VAT is then 5 × 1.21 = €6.05.