

Werkkaart 2015-8 AH-00004(1)

(1) Bereken elk van die volgende as die VP → verkoopprijs en kosprijs → KP:

(a) KP as VP = R3 400 is met 'n wins van 10%.

$$V/s \quad KP = x$$

$$\therefore \text{wins} = 10\% \text{ van } x$$

$$= \frac{10}{100} \times x = 0,1x$$

$$VP = KP + \text{wins}$$

$$R3\,400 = x + 0,1x$$

$$3\,400 = 1,1x$$

$$\therefore x = \frac{3\,400}{1,1}$$

$$x = R3\,090,91$$

$$\therefore KP = R3\,090,91$$

(b) Wins/verlies persentasie, tot 2 des, indien KP = R280 en VP = R260.

$$\text{Verlies} = KP - VP$$

$$= R280 - R260 = R20$$

$$\therefore \text{Verlies } \% = \frac{20}{280} \times \frac{100}{1}$$

$$= \frac{200}{28}$$

$$\approx 7,14 \%$$

(c) VP as die KP = R133,50 met 'n winspersentasie van 4%.

$$\text{Wins} = 4\% \text{ van } KP$$

$$= 4\% \times R133,50$$

$$= R5,34$$

$$\therefore VP = KP + \text{wins}$$

$$= R133,50 + R5,34$$

$$= R138,84$$

(d) Winspersentasie indien die VP = R3x en die KP = Rx.

$$\begin{aligned}\text{Wins} &= \text{VP} - \text{KP} \\ &= 3x - 1x \\ &= 2x\end{aligned}$$

$$\begin{aligned}\text{Wins \%} &= \frac{\text{Wins}}{\text{KP}} \times 100 \\ &= \frac{2x}{x} \times 100 \\ &= 200\%\end{aligned}$$

(2) Indien die wisselkoers \$1 = R7,61 is, bereken:

(a) hoeveel \$ gelyk sal wees aan R367.

$$\begin{aligned}\text{R}367 &= \$ \frac{367}{7,61} \\ &= \$ 48,23\end{aligned}$$

(b) hoeveel \$ geruil sal kan word vir R28 000.

$$\begin{aligned}\text{R}28000 &= \$ \frac{28000}{7,61} \\ &= \$ 3679,37\end{aligned}$$

(c) hoeveel rand gelykstaande sal wees aan \$1 400.

$$\begin{aligned}\$1 &= \text{R}7,61 \\ \therefore \$1400 &= \text{R}7,61 \times 1400 \\ &= \text{R}10654\end{aligned}$$

(3) Bereken die wisselkoers as:

(a) R100 = \$15,19

$$\begin{aligned}\text{R}100 &= \$15,19 & \text{of} & & \$15,19 &= \text{R}100 \\ \therefore \frac{\text{R}100}{100} &= \$ \frac{15,19}{100} & & & \$ \frac{15,19}{15,19} &= \text{R} \frac{100}{15,19} \\ \text{R}1 &= \$ 0,1519 & & & \$1 &= \text{R}6,58\end{aligned}$$

(b) R3 429 = £252,50

$$\begin{array}{lcl} R3429 = £252,50 & \text{of} & £252,50 = R3429 \\ R \frac{3429}{3429} = £ \frac{252,50}{3429} & & £ \frac{252,50}{252,50} = R \frac{3429}{252,50} \\ \therefore R1 = £0,0736 & & \therefore £1 = R13,58 \end{array}$$

(c) €1 000 = R8 765,45

$$\begin{array}{lcl} €1000 = R8765,45 & \text{of} & R8765,45 = €1000 \\ € \frac{1000}{1000} = R \frac{8765,45}{1000} & & R \frac{8765,45}{8765,45} = € \frac{1000}{8765,45} \\ \therefore €1 = R8,76545 & & \therefore R1 = €0,1141 \end{array}$$

- (4) Die rente verdien nadat R4 500 vir 6 jaar belê is, is R2 214. Bereken die rentekoers waarteen die R4 500 belê was indien die rente enkelvoudig bereken is.

$$\begin{aligned} A &= P + \text{rente} \\ &= R4500 + R2214 \end{aligned}$$

$$\therefore A = R6714$$

$$P = R4500$$

$$i = ?$$

$$n = 6 \text{ jr}$$

$$\therefore A = P(1 + i \times n)$$

$$6714 = 4500 (1 + i \times 6)$$

$$\frac{6714}{4500} = 1 + 6i$$

$$1,492 = 1 + 6i$$

$$1,492 - 1 = 6i$$

$$0,082 = i$$

$$\therefore \text{rentekoers} = 0,082 \times 100$$

$$\therefore \text{rentekoers} = 8,2\% \text{ pj.}$$

- (5) 'n Boete word gehef indien 'n munisipale rekening laat vereffen word. Die boete word bereken as 0,06% per dag op die uitstaande bedrag. Indien Colin sy rekening 7 dae te laat vereffen, bereken die boete wat hy moet betaal. Sy agterstallige rekening beloop R787,10.

$$A = ?$$

$$P = R787,10$$

$$A = P(1 + i \times n)$$

$$i = 0,06\% \text{ pd} = 0,0006$$

$$= 787,10 (1 + 0,0006 \times 7)$$

$$n = 7 \text{ dae}$$

$$A = 790,41$$

$$\therefore \text{Boete} = R790,41 - R787,10 \\ = R3,31$$

- (6) Roshwin gaan op 'n buitelandse sakebesoek. Hy gaan eers na Amerika en daarna na Engeland. Hy begroot R30 000 om sy daaglikse koste te dek. Hy besluit om alles om te ruil vir Amerikaanse dollars. In Amerika spandeer hy \$1 984. Die wisselkoers is as volg: \$1 = R6,85 en £1 = R10,12.

(a) Bereken hoeveel \$ Roshwin sal oor hê nadat hy Amerika besoek het.

(b) Bepaal die wisselkoers van die \$ teenoor die £.

(c) Hoeveel £ sal Roshwin hê om in Engeland te spandeer?

$$(a) \text{ Amerika: } R30\,000 = \$ \frac{30\,000}{6,85} \\ = \$4\,379,56$$

$$\therefore \text{Hy het } \$4\,379,56 - R1\,984 \\ = \$2\,395,56 \text{ oor.}$$

$$(b) \$1 = R6,85 \quad \text{met} \quad £1 = R10,12$$

$$\therefore R10,12 = £1$$

$$\therefore \$1 = R6,85 \times 0,09881 \dots$$

$$R \frac{10,12}{10,12} = £ \frac{1}{10,12}$$

$$\$1 = £0,677$$

$$R1 = £0,09881 \dots$$

$$(c) \$1 = £0,677$$

$$\therefore \$2\,395,56 = £0,677 \times 2\,395,56 \\ = £1\,621,79$$