



Training Workbook

# Personnel Calculations & Conversions

Participant's Guide

# **POP**

## **Personnel Operations Program**

**This training course was developed by**

**The POP Unit  
GPO Box 9879  
Canberra ACT 2601**

**Last Revised  
February 2009**

## CONTENTS

<b>OVERVIEW</b> .....	<b>2</b>
<b>REFERENCES</b> .....	<b>3</b>
<b>USING CALCULATORS</b> .....	<b>4</b>
<i>Percentages</i> .....	4
<i>Rounding</i> .....	4
<i>Days, Hours and Minutes Calculations</i> .....	5
<b>COUNTING DAYS</b> .....	<b>8</b>
<b>FORMULAS</b> .....	<b>9</b>
<b>CALCULATING AN EMPLOYEE'S PAY</b> .....	<b>11</b>
Overtime and Penalty rates .....	13
<b>SUPERANNUATION</b> .....	<b>14</b>
ComSuper Calculations (PSS/CSS/PSSap) .....	14
<b>LEAVE ACCRUALS</b> .....	<b>16</b>
Annual Leave Accrual .....	16
Annual Leave Loading .....	16
Long Service Leave Accrual .....	17
Personal Sick/Carer's Leave Accrual.....	18
<b>TAXATION</b> .....	<b>19</b>
Pay As You Go (PAYG) .....	19
Terminology .....	19
Rates of Tax .....	22
<i>Individual Resident Income Tax Rates</i> .....	22
Declarations .....	23
Tax File Number Guidelines .....	23
<i>Withholding declarations</i> .....	24
Taxing of Allowances .....	24
How much to withhold? .....	24
<i>Rebates and Family Tax Benefit</i> .....	25
<i>Higher Education Loan Programme</i> .....	26
<i>Student Financial Supplement Scheme</i> .....	27
Lump Sum Payment in Arrears.....	27
Annual Reporting .....	29

**Note:** The calculations in this module are based on a standard 7 hour 21 minute day (73 hours 30 minute fortnight). This may vary from agency to agency, depending on the particular Certified Agreements.

## OVERVIEW

### *Objectives*

The objective of this course is to provide participants with

- refresher on maths principles
- calculating employee entitlements
- information on the New Tax System and PAYG

### *Target Audience*

This training course is suitable for new staff and staff who are required to calculate and tax employee's entitlements.

### *Note*

- The general conditions of employment contained in this workbook are based on the APS Award 1998 (the minimum award applying in the APS) and other relevant legislation.
- If an agency has displaced the APS Award in their Certified Agreement, then the only authority applying is the agency Certified Agreement (CA) and other relevant legislation (which cannot generally be displaced by a CA).
- Agencies whose employment arrangements come under the *Public Service Act 1999* may have their own determinations on pay and conditions matters.
- Is it important to know which provisions apply in your agency.
- The calculations in this module are based on a standard 7 hour 21 minute day (73 hours 30 minute fortnight). This may vary from agency to agency, depending on the particular Certified Agreement.

The notes in this workbook do not replace primary reference material.

## REFERENCES

- Certified/Collective Agreement
- *Long Service Leave (Commonwealth Employees) Act 1976*
- APS Award 1998
- *Income Tax Assessment Act 1936 & 1997*

### *Tax references:*

- PAYG Withholding Tax Tables

## USING CALCULATORS

Calculators are one of the most commonly used pieces of office equipment in personnel/payroll areas. Some models can do time calculations and calculate periods in days.

Some software programs such as spreadsheets can also perform calculations, including quite complex calculations using formulas.

### Percentages

Calculating a percentage of a number can be done in several ways

$100 \times 20\%$  or  $100 \times 0.20$  or  $100 \times 20/100$  or  $100 \times 1/5$

### Using the % key on your calculator

15% of 80 =

80 x 15% = 12

or

80 x 0.15 = 12

### Exercise 1

Find 15% of 90 ..... 13.5

Find 23% of 365 ..... 83.95

### Rounding

round  
0-4 down 5-9 up

Rounding is an important element in calculations. The general principle of rounding a number is if the value to the right of the number of decimal points you need is 0-4 you round down, and 5-9 you round up.

eg	27.153786	=	27.15	(2 decimal places)
		=	27.154	(3 decimal places)
		=	27.1538	(4 decimal places)
		=	27.15379	(5 decimal places)
	123.36952	=	123.37	(2 decimal places)
		=	123.370	(3 decimal places)
		=	123.3695	(4 decimal places)

When to round to a certain number of decimal places depends on the type of calculation.

The final result of most calculations is either 2 or 4 decimal places, or whole numbers, for example:

- round the result of currency (dollars and cents) to 2 decimal places
- round LSI and annual leave credit to 4 decimal places
- round tax to whole dollars where the tax file number has been provided and ignore any cents where tax file number has not been provided

To round the result of a time calculation from hours, minutes and seconds to hours and minutes, round the minutes down for 0-29 seconds and up for 30-59 seconds.

**Note:** when using a calculator rounding does not usually occur until the end of a calculation.

### Exercise 2

Round the following 28.536475 = 28.54 (2 decimal places)  
 = 28.537 (3 decimal places)  
 = 28.5365 (4 decimal places)  
 = 28.53648 (5 decimal places)

### Days, Hours and Minutes Calculations

Calculating days, hours and minutes is one of the most common calculations in personnel. The process can vary between calculators, but is usually fairly similar.

#### Addition

3 [H] 27 [M] + 4 [H] 46 [M] = 8 hrs 13 mins 0 secs

**Subtraction** is similar

7 [H] 51 [M] - 3 [H] 57 [M] = 3 hrs 54 mins 0 secs

#### Multiplication

Most calculators will allow you to multiply a number of hours by a decimal and keep the answer in hours (or convert the answer by pressing the [H] key), for example:

7 [H] 21 [M] x 2 = 14 hrs 42 mins  
 OR = 14.7 [H] 14 hrs 42 mins

**Division** is the same:

25 [H] 40 [M] ÷ 3 = 8 hrs 33 mins 20 secs

Some calculators will also allow you to multiply and divide hours and minutes by hours and minutes. However, the answer comes up either, in hours, minutes and seconds, or in decimal format, for example:

$$36 \text{ [H]} 45 \text{ [M]} \div 7 \text{ [H]} 21 \text{ [M]} = 5 \text{ (days)}$$

Some calculators might only count to 99 hrs 59 mins, with calculations greater than this converted to a decimal:

$$7 \text{ [H]} 21 \text{ [M]} \times 15 = 110.25 \text{ (hours)}$$

or 110 hrs 15 mins

To convert a decimal of hrs to minutes, multiply by 60, or use the minutes function on your calculator.

$$0.25 \text{ [x]} 60 \text{ [M]} = 15 \text{ minutes or}$$

$$0.25 \text{ [H]} = 15 \text{ minutes (using hrs function)}$$

**Remember:** when performing calculations on your calculator be consistent with the units you are using, either decimal or hours/minutes, e.g. 7 hours 21 minutes (or 7:21 - the common convention to display hours and minutes) equals 7.35 as a decimal, not 7.21.

When doing a lengthy calculation you only need to hit the '=' key when changing between multiply/divide and add/subtract actions ie you can do a series of either multiply/divide steps or add/subtract steps without entering '='.

To change large numbers of hours to weeks/days/hours/minutes first use your base weekly or fortnightly hours.

*Examples*

1. Total leave credit = 158.75 hrs (employee works 7:21/day)

from 158.75 hrs, subtract <sup>150</sup>147 hrs (4 wks @ 36.75 hrs/wk)

$$= 11.75 \text{ hrs [H]} = 11 \text{ hrs } 45 \text{ mins}$$

$$= 11 \text{ hrs } 45 \text{ mins} - 7 \text{ hrs } 21 \text{ mins}$$

$$= 4 \text{ hrs } 24 \text{ mins}$$

therefore the total = 4 weeks, 1 day, 4 hours, 24 minutes



2. Divide 158.75 hrs by 7.35 (i.e., 7:21 as a decimal)

$$= 21.598639 \text{ (days)}$$

subtract 21 to leave part of a day

$$= 0.598639 \text{ days}$$

multiply by 7    **H** 21    **M**    **=** 4.3999

Press the **H** key to display the answer in hours and minutes: 4 hours 24 minutes

**Exercise 3**

a. An employee has 160.3 hours of accrued annual leave. How many weeks, days, hours and minutes is this? The employee works 7:21/day.

$$160.30 \text{ hrs} - 147 \text{ hr} = 13.30 \text{ hrs} - 7 \text{ hr } 21 \text{ mins} = 6 \text{ hr } 9 \text{ mins}$$

Total: 4 weeks, 1 day, 6 hr, 9 mins

b. An employee has 239.64 hours of accrued annual leave. How many weeks, days, hours and minutes is this?

$$239.64 \div 7.35 = 32.60408 \text{ (days)} - 32 = 0.604$$

6 weeks,  
total: 32 days, 4 hrs, 26 mins

## COUNTING DAYS

Some calculations in personnel are based on working days of the week (Monday to Friday only), whilst others are based on calendar days (includes Saturday and Sunday). Most salary calculations are based on a 10 day fortnight, however there may be some allowances that are based on a 14 day fortnight.

Calculations for long service leave are based entirely on calendar days. Annual leave and personal sick/carer's leave credits are deducted by working days but accrual calculations are based on calendar days service.

### Examples

- How many week days and calendar days are there from Thursday 2 March 2006 to Monday 19 June 2006 (inclusive)?

Week days = 78  
Calendar days = 110

- Defer an increment that was due on 7 November 2006 by 35 calendar days.

Increment is payable from 12 December 2006.

### Exercise 4

- How many week days and calendar days are there from Monday 1 May 2006 to Friday 2 June 2006 inclusive?

33 calendar days

25 week days

- Defer an increment that is due on 5 October 2006 by 43 calendar days.

17<sup>th</sup> November

## FORMULAS

There is a mathematical convention used to prioritise 'order of operations', easily remembered by the term **BODMAS**

**B**rackets  
**O**f  
**D**ivision  
**M**ultiplication  
**A**ddition  
**S**ubtraction

### Exercise 5

- a. Using the BODMAS rule work out the answer to the following:

$$4 + 5 \times 9 \div 3 = 19$$

If BODMAS wasn't used what other answers are possible:

27

- b. Use the BODMAS rule to work out the answer to the following to 3 decimal places:

$$14 \div (9 \times 3) + 60 = 64.9 \quad 60.517$$

The same rule applies when using the formula for calculating the LSL components for taxation purposes

$$\frac{A}{B} \times \left[ \frac{C(B+D)}{E} - F \right]$$

**Note:** ignore any fractions in the answer to the formula in the square brackets

$$\frac{C(B+D)}{E} - F \quad \text{e.g. if answer is } 117.88, \text{ use } 117$$

ignore the fraction, then divide the rest for  
 the answer

Exercise 6

Using the BODMAS rule, calculate the answer to the following:

$$\frac{46665}{278} \times \left[ \frac{8073(278+30)}{12358} - 30 \right]$$

$$167.859 \times \frac{8381}{12358} = 0.678 - 30$$

$$\left( \frac{8073 \times 308}{12358} \right)$$

$$\textcircled{1} 167.86 \times \frac{8073 \times 308}{12358} - 30$$

$$\textcircled{2} 167.86 \times \frac{2486484}{12358} - 30$$

$$\textcircled{3} 167.86 \times 20130 - 30$$

$$\textcircled{4} 167.86 \times 171 \text{ (Drop of dec)}$$

$$\$28,704.06$$

## CALCULATING AN EMPLOYEE'S PAY

An agency collective agreement (CA), or relevant Award contains:

- the salary rates
- the calculation of fortnightly salary
- the method of payment
- calculation of hourly rates for overtime, restriction duty, etc
- calculation of a part-time salary
- any allowances payable
- and other calculations relevant to the agency.

The most common formula used in the Commonwealth for calculating a fortnightly salary is:

$$\text{Annual Salary} \times 12 \div 313 = \text{Fortnightly Salary}$$

### *Why use 12 and 313?*

Every 12<sup>th</sup> year there are 27 pay periods in a financial year. This will occur next in 2015/16. To take account of this extra payday a fortnightly salary is worked out over a 12 year cycle, i.e. in 12 years there are 313 paydays.

### *Example*

$$\begin{aligned} \$52,500 & \quad \times \frac{12}{313} & = & \$2012.7795 \\ & & & = & \$2012.78 \text{ (rounded)} \end{aligned}$$

This formula can be amended easily to calculate other rates:

- weekly           (÷ by 2)
- daily           (÷ by 10)
- hourly          (÷ by 73.5)
- minute         (÷ by 73.5 ÷ 60)

**Remember:** when calculating figures, do not round until you reach the final figure:

i.e. just leave the full screen on your calculator.

*Example*

3.5 hrs salary @ \$39,650 p.a.

$$\begin{aligned}
 &= \$39,650 \times 12 \div 313 \\
 &= \$1520.12779552 \text{ per fortnight} \\
 &= \$1520.12779552 \div 73.5 \text{ (= hourly rate)} \\
 &= \$20.6820108234 \text{ per hour} \\
 &= \$20.6820108234 \times 3.5 \text{ hrs} \\
 &= \$72.3870378819 \\
 &= \$72.39 \text{ (to 2 decimal places)}
 \end{aligned}$$

You would not normally enter the = key until the end i.e.:  $39650 \times 12 \div 313 \div 73.5 \times 3.5$   
 $= 72.387037$

**Exercise 7**

a. What is the fortnightly salary for an employee receiving \$65,000 per annum?  
 \$2492.

b. What is the hourly rate for an employee earning \$42,000 per annum?

$$\begin{aligned}
 & \$42,000 \times 12 \div 313 = \$1610.22 \\
 & \qquad \qquad \qquad = \$21.90 \\
 & \qquad \qquad \qquad \underline{\underline{\$21.91}}
 \end{aligned}$$

## Overtime and Penalty rates

Generally, overtime is calculated on a 38 hr wk or 36¾ hr wk, depending on the day worked (unless otherwise prescribed in an agency CA).

First find the person's hourly pay rate, using the appropriate "multiplier".

The multipliers are the two common 'hours per week' rates:

Monday - Saturday = 38 hr/wk

Sunday, and Public Holidays after ordinary hours are worked = 36¾ hr/wk

### Examples

- 3 hrs overtime for 36¾ week worker on \$34,000 p.a. If worked on a weeknight, it is 3 hrs overtime @ 1½X:

$$\$34,000 \quad x \quad \frac{12}{313} = \$1303.514376$$

$$\begin{aligned} \div \quad 76 \text{ hrs} &= \$17.151504 \text{ per hour (38 hrs/wk)} \\ x \quad 3 \text{ hrs} &= \$51.454514 \text{ (for 3 hours)} \\ x \quad 1.5 &= \$77.181772 \text{ (for OT @1½X)} \\ &= \$77.18 \text{ (2 decimal places)} \end{aligned}$$

- 6 hours Sunday duty for 36¾ wk worker on \$26,300 p.a

$$\$26,300 \quad x \quad \frac{12}{313} = \$1008.3067$$

$$\begin{aligned} \div \quad 73.5 \text{ hrs} &= \$13.718458 \text{ (for 36¾ wk divisor)} \\ x \quad 6 \text{ hrs} &= \$82.310748 \text{ (for 6 hours)} \\ x \quad 2 &= \$164.62149 \text{ (for OT @2X)} \\ &= \$164.62 \text{ (2 decimal places)} \end{aligned}$$

## SUPERANNUATION

### ComSuper calculations (PSS/CSS/PSSap)

There are currently three contributory superannuation schemes operating in the Commonwealth public service, the Public Sector Superannuation Scheme (PSS), the Commonwealth Superannuation Scheme (CSS) and the PSS Accumulation Plan (PSSap). In the PSS employees may vary their contributions between 2% and 10% and in the CSS between 5% and 10%. The employer also makes a contribution. PSSap members may choose to contribute any amount they wish.

The employee superannuation contribution is calculated as follows:

$$(\text{Annual Salary plus Allowances for Super}) \div 26 \times 0.05$$

- Round the result up to next 10¢ for CSS
- Round to the nearest cent for the PSS.

*A short cut calculation is simply to divide the superannuation salary by 520 (i.e.  $26 \div 0.05$ ).*

#### Examples

1. A 5% super contribution in the CSS.

$$\begin{array}{rcl} 5\% \text{ on } \$31,500 = & \$31,500 \div 26 & \times 0.05 \\ = & \$60.57692 & \\ = & \$60.60 & \text{(rounded up to next 10 cents)} \end{array}$$

2. A 5% super contribution in the PSS.

$$\begin{array}{rcl} 5\% \text{ on } \$31,500 = & \$31,500 \div 26 & \times 0.05 \\ = & \$60.57692 & \\ = & \$60.58 & \text{(rounded to nearest cent)} \end{array}$$

### PSSap

Employer contributions: employers contribute at least 15.4% of a member's superannuation salary, subject to superannuation law.

Employee contributions: employee contributions are optional and may be either before- or after-tax. Before-tax contributions, otherwise known as salary sacrifice contributions, are subject to individual employers allowing them.



### Other Percentages

When an employee wishes to contribute a percentage other than 5% (or 10%), for CSS members their contribution is first calculated on 5% (including the upward rounding), then reduced to 1%, then multiplied to take them to their new percentage. The final figure is not rounded. For PSS members the salary is simply divided by 26 then multiplied by the necessary percentage.

1. An 8% CSS contribution

$$\begin{aligned}
 8\% \text{ on } \$41,500 &= \$41,500 \div 26 \times 0.05 \\
 &= \$79.807692 \\
 &= \$79.90 \quad (\text{rounded up to nearest } 10\phi) \\
 \text{therefore } 1\% &= \$15.98 \quad (\$79.90 \div 5) \\
 \text{therefore } 8\% &= \$127.84 \quad (\$15.98 \times 8) \text{ (not rounded up to } 10\text{c)}
 \end{aligned}$$

2. An 8% PSS contribution

$$\begin{aligned}
 8\% \text{ on } \$41,500 &= \$41,500 \div 26 \times 0.08 \\
 &= \$127.69 \text{ (not rounded up)}
 \end{aligned}$$

### Exercise 8

a. Calculate a 6% CSS contribution on a salary of \$65,233

$$\begin{aligned}
 6\% \text{ CSS} &= 26 \times 0.05 \\
 &= 128.998 \\
 &= 129.00 \text{ (rounded)} \\
 1\% &= 25.80 \\
 6\% &= 154.80
 \end{aligned}$$

b. Calculate a 2% PSS contribution on a salary of \$43,950

$$\begin{aligned}
 43,950 &= 26 \times 0.05 \\
 &= 44.519 = 44.52 \text{ (rounded)} \\
 1\% &= 8.90 \\
 2\% &= 17.80
 \end{aligned}$$

### Part Percentage Rates

Members of the CSS can opt to pay part percentages between 5% and 10%. They can either nominate a percentage ie. 6.5 %, or they can nominate a fortnightly amount that is between 5% and 10% of their superannuation salary.

For example: If their superannuation salary was \$41,500 they can elect to pay between \$79.90 and \$159.80 per fortnight (5% and 10%). They might opt to pay \$85.00 per fortnight, which is approximately 5.32%.

## LEAVE ACCRUALS

Leave types that have accruals are annual/recreation leave, long service leave, personal sick/carer's leave and war service sick leave.

### Annual Leave Accrual

Agency CAs contain a variety of accrual conditions. Under the APS Award 1998, the accrual for annual leave is:

$$\frac{A \times B \times C}{D}$$

- A = number of hours per week for period *36.45*
- B = number of calendar days to count as service in the period
- C = a basic annual leave credit of 4 weeks plus any additional credits for remote locality service as prescribed in APS Award 1998
- D = number of actual calendar days in the year of service *365*

### Payment In Lieu

Employees are entitled to receive any unused annual leave and any pro-rata annual leave on ceasing APS employment as payment in lieu, calculated as follows:

**AL accrued in hours (including pro-rata) x hourly rate using salary on cessation**

### Exercise 9

How much annual leave will an ongoing employee accrue for the period 1 January 2006 to 30 April 2006?

$$\frac{36.45 \times 120 \times 4 \text{ weeks}}{365} = 48.3268$$

*48.3268 = 48 weeks 11.0 days*

### Annual Leave Loading *- Don't have ALL (only)*

From 2 January 1996 annual leave loading (ALL) ceased to accrue for most APS employees and was incorporated into base rates of pay. Under the APS Award 1998, only some shift workers and employees in remote localities continue to accrue ALL. The formula for ALL is:

$$\text{Annual Salary on 1 January} \times \frac{6}{313} \times 17.5\% \times \frac{\text{accrued leave hours on 1 Jan}}{36.75}$$

## Long Service Leave Accrual

An employee must have 10 years qualifying service to be eligible for a grant of LSL. Under section 18 of the LSL Act, LSL accrues at the rate of 3/10 of a month for each year of service, represented by the following formula:

**Completed years of qualifying service x 0.3**

### Pro-rata LSL

Where an employee with at least 1 year of service but less than 10 years of service ceases Commonwealth employment due to either minimum age retirement or retrenchment, they are eligible to take any pro-rata LSL which has accrued or receive payment in lieu. See subsection 17(1) and (2) of the LSL Act.

### Payment In Lieu

Employees ceasing Commonwealth employment after at least 10 years of service are entitled to receive payment in lieu for any unused LSL credits. See subsection 16(4) of the LSL Act.

Pro-rata payment in lieu may be made after at least 1 year of service where the cessation is due to:

- age retirement (*minimum*)
- death
- ill health
- retrenchment

Payment in lieu is based on completed years and months of service and salary on cessation, represented by the following formula:

$$\frac{\text{Salary on cessation} \times \text{LSL credit}}{12}$$

### Example

An employee has worked for 15 years.

Their LSL credit is: 15 (years) x 0.3 (months) = 4.5 months

Their salary is \$63,299. If they ceased Commonwealth employment they would be entitled to payment in lieu.

This amount is:  $\frac{\$63,299 \times 4.5}{12} = \$23,737.12$

**Exercise 10**

Betty Croker is a non-ongoing employee in your agency. She commenced on 4 October 2005 as a full-time employee on a salary of \$41,300 pa and her engagement contract is due to expire on 6 October 2006. Betty's date of birth is 14 September 1944 and she has no eligible prior service.

$$\frac{1101106 \text{ to } 0610106}{365} = 280$$

a) Calculate Betty's full annual leave accrual for 2006 and the payment in lieu (she has taken the leave she accrued in 2005).

$$\frac{26195 \times 274 \times 4}{365} = 112.22 \text{ mins}$$

$$112.22 \times 21.54 = 2417.17$$

$$2417.17 \times 112.22 = 271206.8$$

b) Is Betty entitled to a payment in lieu of LSL? If so, calculate her LSL entitlement and payment in lieu. *Yes*  $\frac{410105 \text{ to } 0610106}{365} = 1 \text{ year}$

$$1 \times 0.3 = 0.3 \text{ months}$$

$$41,300 \div 12 \times 0.3 = \$1032.50$$

**Personal Sick/Carer's Leave Accrual**

These are generally included in a single accrual. The rate and time of accrual vary in agency CAs. The APS Award conditions are complex and are discussed in the Leave Workshop.

War service sick leave is also covered in the Leave Workshop. *20 days*

## TAXATION

Employers or payers are obliged to withhold tax from employee's pay and remit the money to the Commissioner of Taxation. All remuneration or rewards for personal services are income and must be included as assessable income. Income is assessed in the year of receipt (not necessarily in the year earned).

### Pay As You Go (PAYG)

PAYG withholding is an integrated, comprehensive system that replaced all old withholding tax systems, including Pay As You Earn (PAYE), the Prescribed Payments System and the Reportable Payments System from 1 July 2000.

'Withholding' means the process by which payers deduct amounts from payments made to others (e.g. payees) and send these amounts to the Australian Taxation Office (ATO).

Under PAYG withholding, businesses and other enterprises must deduct amounts from certain payments they make to others, including:

- payments to employees, company directors and office holders
- payments under labour hire arrangements
- payments under voluntary agreements, and
- payments where an Australian Business Number (ABN) has not been quoted.

### Terminology

The New Tax System changed certain terms to describe tax concepts and processes:

<b>The New Tax System</b>
Tax file number declaration ( <i>marginal tax rate component</i> )
Withholding declaration ( <i>family tax benefit or rebates component</i> )
Payer – a business or entity that makes a payment
Payee – can include a non-individual
Tax tables – various tax tables apply to different types of payments
Payment Summary – different payment summaries apply depending on the payment
Withholder – all government bodies have been determined by the ATO to be <i>large withholders</i>
ABN is the no. issued by the ATO identifying the payer

The amount to withhold from payments made to payees is determined mainly by the information provided on a *Tax file number declaration* and a *Withholding declaration* form.

The amount of tax to be withheld is set out in the PAYG Withholding Tax Tables produced by the ATO. The ATO also has a Statement of Formulae to use in computerised payroll systems.

Separate formulas apply to payees who:

- have claimed the tax free threshold and are eligible to receive a leave loading (LL)
- have claimed the tax free threshold and are NOT eligible to receive a leave loading
- have NOT claimed the tax free threshold
- have not provided their payers with a valid Tax File Number
- are foreign residents
- have a Higher Education Loan Program (HELP) debt
- have a Student Financial Supplement Scheme (SFSS) debt.

All tax withholding amounts are in whole dollars. Rounding of tax amounts is as follows:

- where the tax file number is provided, round to whole dollars
- where the tax file number is not provided, ignore any cents.

### How to work out withholding (tax) amounts from the tax tables

1. Calculate the fortnightly income
2. From column 1 find the closest lower figure to the fortnightly income
3. Use the appropriate column to find the correct amount to be withheld

#### Example 1

Salary is:     \$36,127 per annum  
                   \$1,385.06 per fortnight

In column 1 locate the closest lower figure, i.e. \$1,384

Tax free threshold with leave loading (Column 2)	\$192.00
Tax free threshold no leave loading (Column 3)	\$188.00
No tax free threshold (Column 4)	\$362.00
No tax file number (withhold 46.5%)	\$644.00

The net pay for an employee with no LL is:	Salary	\$1,385.06
	Tax	<u>\$ 188.00</u>
	Net	\$1,197.06

*Example 2*

Salary is: \$42,058 per annum  
\$1,612.45 per fortnight

In column 1 locate the closest lower figure, i.e. \$1,612

Tax free threshold with leave loading	\$270.00
Tax free threshold no leave loading	\$264.00
No tax free threshold	\$438.00
No tax file number	\$749.00

The net pay for an employee with LL is:	Salary	\$1,612.45
	Tax (LL)	<u>\$ 270.00</u>
	Net	\$1,342.45

If the income is greater than the highest amount on the tax table i.e. greater than \$5000 per fortnight, use the instructions at the bottom of the tax table to calculate the tax amount.

*Example*

For Tax free threshold no leave loading

Salary: \$135,000  
\$5,175.72 per fortnight

In column 1 locate the closest lower figure, ie. \$5,000

\$5,000	\$1,538.00
\$5,175 - \$5,000 = \$175.00	
Tax on \$175.00 @ \$0.415	<u>\$ 72.63</u>
Add =	\$1,610.63
Tax rounded to the nearest dollar	\$1,611.00

Therefore the net pay is	Salary	\$5,175.72
	Tax	<u>\$1,611.00</u>
	Net	\$3,564.72

## Rates of Tax

The amount to withhold from payments should be in accordance with the PAYG Withholding Tax Tables produced by the ATO. The ATO also provides a Statement of Formulae to use in computerised payroll systems.

The PAYG Withholding tax tables are:

Title	ATO reference no.	Effective for payments from
Fortnightly Rates* - incorporating Medicare levy with/without leave loading	NAT 1006	1 July 2008
Higher Education Loan Programme (HELP)	NAT 2185	1 July 2008
Student Financial Supplement Scheme (SFSS) including statement of formulas	NAT 3307	1 July 2008
Unused Leave Payments on Termination of Employment	NAT 3351	1 July 2008
Eligible Termination Payments	NAT 3349	1 July 2008
Tax table for back payments	NAT 3348	1 July 2008

\* there are equivalent weekly, monthly and quarterly rates available

All tax withholding amounts are in whole dollars. Rounding of tax amounts is as follows:

- where the tax file number is provided, round to whole dollars
- where the tax file number is not provided, ignore any cents.

### Individual Resident Income Tax Rates

These rates apply to individuals who are residents of Australia for tax purposes.

Tax rates 2008-2009 effective from 1 July 2008	
Taxable income	Tax rate %
\$0 - \$6000	0
\$6001 - \$34,000	15
\$34,001 - \$80,000	30
\$80,001 - \$180,000	40
Greater than \$180,000	45
Medicare levy is 1.5% of taxable income. For individuals who do not have private hospital cover through private health insurance and taxable income is over \$50,000 (\$100,000 for couples and families), a 1% surcharge applies. The surcharge is calculated on lodgement of the individuals tax return.	



## Declarations

### What a payer needs to know about TFN declarations:

- A TFN declaration should be completed when a payee starts a relationship with a payer, such as starting a job or converting a superannuation entitlement to a pension.
- Payers must send a completed TFN declaration to the ATO within 14 days of the commencement of a payer/payee relationship (can be done electronically).
- If a payee does not provide an effective, complete TFN declaration within 14 days, the payer must complete a declaration with as much payee detail as is available and withhold tax from their salary at the top marginal rate (46.5%).
- For TFN declaration to be 'valid', all the information fields must be completed.
- If a payee has answered question 1 with a cross against "application made to the ATO for a new or existing TFN", then the payer can withhold an amount applicable to a TFN having been quoted. If a payer does not have the payees tax file number after 28 days, the top marginal rate must be withheld from future payments.
- If a payee wishes to vary their rate of tax, they will need to complete a Withholding declaration form, not a TFN declaration.
- A TFN declaration is valid for 12 months from the last payment made to the employee.

### Tax File Number Guidelines

The Privacy Commissioner has issued Tax File Number Guidelines under section 17 of the *Privacy Act 1988*. The guidelines dated 21 December 1992 are legally binding and aim to restrict the use of tax file number information.

Unauthorised use or disclosure of tax file numbers is also an offence under the *Taxation Administration Act 1953*. The tax file number rules are also partly contained in the *Income Tax Assessment Act 1936*.

Storage of Tax File Number Declarations is also subject to these guidelines, and to comply, most agencies keep TFN Declarations in secure (locked) separate storage rather than on personal files.

The guidelines are available on the Privacy Commissioner's website at [www.privacy.gov.au](http://www.privacy.gov.au), under Privacy Act and Other Laws.

### ***Withholding declarations***

The Withholding declaration is a booklet which enables payees to advise their payer of any variations or changes to their tax circumstances.

Payees may complete the declaration for the following reasons:

- When starting a payer/payee relationship to claim an entitlement. A TFN declaration must be completed by the payee, quoting their tax file number (or exemption), before completing a Withholding declaration.
- An existing TFN declaration exists, and they;
  - cease to be an Australian resident for tax purposes
  - claim or discontinue claiming the tax free threshold
  - advise about a HELP debt or a SFSS debt, or changes to them
  - claim an entitlement or variation to an entitlement to the family tax benefit
  - claim an entitlement or variation to an entitlement to a dependant spouse, zone or special rebate.

The Withholding declaration is a 25 page booklet in which the payee completes the worksheets to calculate their entitlement and provides the payer with *only* the completed last page of the booklet. It is recommended that the payee keeps the worksheet calculations for their records.

The declaration should be retained by the payer and does not need to be sent to the ATO.

### **Taxing of Allowances**

Allowances are separately identified payments made to a payee e.g. for working conditions, for qualifications or work related expenses. Payers should ensure allowances are taxed correctly.

For further information on taxing allowances refer to PAYG Bulletin no. 1 – Taxing of allowances for the 2000/01 and future income years, valid from 1 July 2000.

### **How much to withhold?**

Once a payee has completed a TFN declaration and/or a Withholding declaration, the amount the payer must withhold depends on whether the payee:

- has claimed the tax free threshold and is eligible to receive a leave loading
- has claimed the tax free threshold and is NOT eligible to receive a leave loading
- has NOT claimed the tax free threshold
- has not provided a valid Tax File Number
- is a foreign resident
- has a HELP debt or a SFSS debt.

From 1 July 2000, Australian residents for tax purposes do not pay tax on the first \$6000 of their yearly income, known as the tax free threshold.

Where there are 27 pays in a financial year, payees may request an additional amount to be withheld from their earnings to cover any shortfall in tax for the financial year. A table with the additional amount is in the Fortnightly rates tax table.

Where a payee has answered 'No' to the question 'Are you an Australian for taxation purposes?', foreign resident tax rates apply. Details on how much to withhold are in the Fortnightly rates tax table.

### ***Rebates and Family Tax Benefit***

A payee must use a Withholding declaration form to advise the payer of their entitlement to a rebate or Family Tax Benefit (FTB). The declaration is effective from the first payday after the payee has provided the form.

If a payee is not claiming the tax free threshold or has not provided a tax file number, rebates do not apply (i.e. not allowed when using columns 4 and 5 of the tax table).

Use the Ready Reckoner on page 3 of the tax table to convert the payee's annual rebate or FTB figure to a fortnightly amount. Rebates and FTB reduce the amount in columns 2 and 3 of the tax table.

#### *Example*

For Tax free threshold with leave loading

Salary per annum	\$43,576
Annual rebate claimed	\$1,340

First calculate fortnightly rebate using the ready reckoner

1300 =	\$49.00
40 =	<u>\$ 2.00</u>
Total	\$51.00

The gross pay is \$1,670.65

tax	\$288.00
less rebate	<u>\$ 51.00</u>
Total tax	\$237.00

Net \$1,433.65

### **Higher Education Loan Programme**

On 1 January 2005 a new suite of loans called the Higher Education Loan Programme (HELP) was introduced. HELP offers Commonwealth loans to assist students to pay their education fees and to study overseas.

A payee who has provided a Tax file number declaration or a Withholding declaration form and has answered 'Yes' to the HELP question may need additional amounts withheld from their income.

If their fortnightly earnings are \$1,598 or more (2008/2009 rates), use the PAYG Withholding HELP Tax Table to calculate the HELP component. The HELP component is added to the normal tax and increases the amount of tax payable.

Do not add a HELP or SFSS component when the employee has not supplied a tax file number.

#### *Examples*

With tax free threshold no leave loading

Salary	\$42,000 per annum
	\$1,610.22 per fortnight

Using the HELP tax table find the appropriate income in column 1, i.e. \$1,610  
The HELP component is found in column 2, i.e. \$64.00

Salary	<u>\$1,610.22</u>
Tax	\$ 264.00
plus HELP	<u>\$ 64.00</u>
Total tax	\$ 328.00

Net	\$1,282.22
-----	------------

Salary	\$49,000 per annum
	\$1,878.59 per fortnight

Using the HELP tax table find the appropriate income in column 1, i.e. \$1,878.  
The HELP component is found in column 2, i.e. \$84.00

Salary	<u>\$1,878.59</u>
Tax	\$ 354.00
plus HELP	<u>\$ 84.00</u>
Total tax	\$ 438.00

Net	\$1,440.59
-----	------------

## **Student Financial Supplement Scheme**

The Student Financial Supplement Scheme (SFSS) is a voluntary loan scheme for tertiary students to help cover their expenses while they study. Five years after the loan is taken out the ATO becomes responsible for collecting the outstanding loan. At this stage the loan becomes an accumulated Financial Supplement debt. Compulsory repayments of accumulated Financial Supplement debts are made through the tax system when the person's taxable income reaches the minimum threshold.

If a payee has provided a Withholding declaration and has answered 'Yes' to question 7(b) 'Do you have an accumulated Financial Supplement debt?' and their fortnightly earnings are \$1,598 or more (2008/2009 rates), use the PAYG Withholding Student Financial Supplement Scheme (SFSS) Fortnightly Tax Table to calculate the SFSS component.

The SFSS component is to be withheld from all earnings, including taxable allowances, bonuses and commissions.

Do not withhold any amount for SFSS from lump sum termination payments.

## **Lump Sum Payment in Arrears**

Where a payee receives a lump sum payment of assessable income, such as salary, wages or allowances (not payments for unused leave), that represents a back adjustment for work already performed, concessional tax treatment may apply.

The tax table for back payments (NAT 3348) issued in November 2004 replaces the previous tax tables on lump sum payments in arrears and bonuses and similar payments. Included in this table are three methods for calculating amounts to be withheld depending on when the payment accrued.

Method A is used when the payment has accrued in the current financial year. Using this method tax is withheld as if the payment had been made in the pay periods to which it relates.

When the payment accrued in a prior financial year but the payment occurs less than 12 months after this use Method B to calculate the withholding amount:

1. Use the relevant tax tables to work out the amount to withhold on the payee's normal earnings for the current pay period
2. Divide the back payment by the number of pay periods over which it accrued
3. Add this figure (disregarding any cents) to the current normal earnings
4. Use the same tax table as previously to determine the amount to withhold on the combined payment amount
5. Subtract the amount worked out in step 1 from the amount worked out in step 4
6. Multiply the result by the number of normal pay periods over which the amount accrued to obtain the total amount to withhold from the back payment.

Method C is used to calculate the amount to withhold from back payments of salary or wages that were accrued more than 12 months before the payment date, and all other amounts that accrued in a prior financial year. Method C uses the payee's marginal rate. The steps to calculate this are outlined on page 36.

Lump sum payments for work performed 12 months (or longer) prior to the date of payment which is in excess of \$400, must be shown on Label E of the payee's payment summary.

A letter detailing the back payment should also be provided to the payee for inclusion in their tax return. This letter should:

- state the payer's PAYG withholding details including name and address
- state the payee's details including their name, address, and TFN
- provide separate details of each back payment showing the amount accrued, the amount withheld from this payment, and the period to which the payment relates

For further information refer to the *PAYG Withholding Tax table for back payments (NAT 3348)*.

## Payment Summary

The payment summary records the total payments made, total tax withheld and certain other information about the payee.

There are several different types of payment summaries:

- Payment Summary – Individual Non Business
- Payment Summary – Labour Hire and Other Specified Payments
- Payment Summary – Voluntary Agreement
- Payment Summary - Withholding where ABN not Quoted
- ETP Payment Summary

At the end of each financial year (the period 1 July to 30 June), a payer who has withheld tax from payments made to others must complete a payment summary for each payee and give it to the payee. The payment summary must be given to the payee by 14 July after the financial year.

If a payee ceases employment during the financial year, a payee can request a payment summary at any time. However, the payer should not provide a mid-year payment summary if they provided reportable fringe benefits to the payee. This is because the reportable fringe benefits amount cannot be completed until the end of the financial year.

## Annual Reporting

By 14 August after the end of each financial year, the payer must provide a report to the ATO about payments from which they withheld amounts (including nil amounts) if the payments were of the following types:

- salaries, wages, allowances, bonuses or commissions paid to an employee
- payments to company directors
- payments to office holders
- return to work payments
- pensions or annuities
- eligible termination payments
- payments for unused leave
- compensation, sickness or accident payments
- payments under a voluntary agreement, and
- payments under a labour hire arrangement.

Payers can report to the ATO on the approved form or provide copies of all payment summaries issued to payees for the financial year, together with a statement that totals all the amounts from the payment summaries.

## Additional Exercises

Working in personnel/payroll, there will be many circumstances when you will be required to manually calculate an employee's salary, tax and other pay adjustments. The documents you have received, e.g. tax tables and payroll calendars are the first of many documents you will need to keep close at hand. These documents will form your own personal reference material.

Using these documents and the previous examples, calculate the following net pays, i.e. the net pay is the fortnightly salary less tax, superannuation and deductions.

1. Salary	APS2 \$36,325 pa	\$ 1242.65	
Tax	With tax free threshold no LL	\$ 193	
Superannuation	CSS 5% contribution	\$ 69.75	
Deductions	\$55.50 pf life insurance	\$ 55.50	
	\$100.00 pf savings account	\$ 100	
<b>Total Net Pay</b>		\$ 919.25	
2. Salary	APS6 \$57,588 pa	\$ 2107.90	
Tax	With tax free threshold no LL, HELP	\$ 596	
Superannuation	PSS 5% contribution	\$ 110.75	
Deductions	\$75.80 pf health insurance	\$ 75.80	
<b>Total Net Pay</b>		\$ 1455.80	
3. Salary	APS4 \$45,188 pa	\$ 1732.45	
Overtime	3 hrs on a Tuesday	\$ 106.03	102.58
Gross	Tax payable on this amount	\$ 1834.80	1835.02
Tax	No tax file number	\$ 512	512
Superannuation	PSS 2% contribution	\$ 34.76	
Deductions	\$12.50 pf insurance	\$ 12.50	
<b>Total Net Pay</b>		\$ 1279.26	1279.26
4. Salary	APS3 \$40,292 pa	\$ 1544.74	
Tax	With tax free threshold with LL with rebate of \$1,600	\$ 185	
Superannuation	CSS 10% contribution	\$ 185	
<b>Total Net Pay</b>		\$ 1209.74	
5. Salary	APS5 \$46,426 pa	\$ 1779.91	
Tax	With tax free threshold no LL	\$ 320	
Superannuation	5% PSS contribution	\$ 89.28	
Deductions	\$75.00 pf to credit union	\$ 75	
	\$185.00 pf mortgage	\$ 185	
	\$45.60 pf health insurance	\$ 45.60	
<b>Total Net Pay</b>		\$ 1065.03	



## Personnel Calculations & Conversions – Answers Additional Exercises

### Exercise 1

Find 17.5% of \$1500                     \$262.50  
 Find 4% of \$55,000                     \$2200

### Exercise 2

Round the following 39.627594     = 39.63                     (2 decimal places)  
    = 39.628                     (3 decimal places)  
    = 39.6276                     (4 decimal places)  
    = 39.62759                     (5 decimal places)

### Exercise 3

- a. An employee has 136.5 hours of accrued annual leave. How many weeks, days, hours and minutes is this? The employee works 7:21/day.

Divide 136.5 by 7  $\boxed{H}$  21  $\boxed{M}$  = 18.571428

Subtract 18 (days – 3 weeks, 3 days), multiply .571428 by 7  $\boxed{H}$  21  $\boxed{M}$  to get 4 hours and 12 minutes

therefore the total = 3 weeks, 3 days 4 hours and 12 minutes

- b. An employee has 310 hours of accrued annual leave. How many weeks, days, hours and minutes is this?

4 weeks is 147 hours, therefore 8 weeks is 294 hours

Subtract 294 from 310 = 16 hours

Divide 16 hours by 7  $\boxed{H}$  21  $\boxed{M}$  = 2.1768707

Subtract the 2 (days) and multiply the remainder by 7  $\boxed{H}$  21  $\boxed{M}$  = 1 hour 18 minutes

The employee has 8 weeks, 2 days, 1 hour and 18 minutes of leave accrued.

### Exercise 4

- a. How many week days and calendar days are there from Tuesday 8 August 2006 to Wednesday 30 August 2006 inclusive?

17 week days  
 23 calendar days

- b. Defer an increment that was due on 22 August 2006 by 39 calendar days.

30 September 2006

### Exercise 5

Using the BODMAS rule work out the following to 2 decimal places:



$6 \div (2 + 5) \times 9$  is calculated as follows  $2 + 5 = 7$ ,  $6 \div 7 \times 9 = 7.71$

**Exercise 6**

Using the BODMAS rule, calculate the answer to the following:

$$\frac{53000}{180} \times \left[ \frac{7023 (180+9)}{11234} - 9 \right]$$

$$294.44 \times \left[ \frac{7023 \times 189}{11234} - 9 \right]$$

$$294.44 \times [ 118.15 - 9 ]$$

$$294.44 \times 109 \text{ (ignore decimal)} = 32,093.96$$

**Exercise 7**

a. What is the fortnightly salary for an employee receiving \$35,667 per annum?

$$35,667 \times 12 \div 313 = 1367.42$$

b. What is the hourly rate for an employee earning \$43,269 per annum?

$$= \$43,269 \times 12 \div 313$$

$$= \$1658.87539936 \text{ per fortnight}$$

$$= \$1658.87539936 \div 73.5 \text{ (= hourly rate)}$$

$$= \$22.56973332 \text{ per hour}$$

$$= \$22.57$$

**Exercise 8**

a. Calculate a 9% CSS contribution on a salary of \$67,223

$$9\% \text{ on } \$67,223 = \$67,223 \div 26 \times 0.05$$

$$= \$129.275$$

$$= \$129.30 \text{ (rounded up to nearest } 10\phi)$$

$$\text{therefore } 1\% = \$25.86 \text{ } (\$129.30 \div 5)$$

$$\text{therefore } 9\% = \$232.74 \text{ } (\$25.86 \times 9) \text{ (not rounded up to } 10c)$$

b. Calculate a 4% PSS contribution on a salary of \$47,899

$$4\% \text{ on } \$47,899 = \$47,899 \div 26 \times 0.04 = \$73.69$$

**Exercise 9**

a. How much annual leave will an ongoing employee accrue for the period 15 September 2006 to 31 December 2006?

$$\frac{36.75 \times 108 \times 4}{365} = 43.4959, \text{ or } 43 \text{ hours } 30 \text{ minutes}$$

b. How much annual leave will an employee accrue between 12 April 2006 and 14 December 2006?

$$\frac{36.75 \times 247 \times 4}{365} = 99.4767, \text{ or } 99 \text{ hours } 29 \text{ minutes}$$



**Exercise 10**

Sue Green commenced at your agency on 1 December 2004 as a full-time employee on a salary of \$49,500 pa and she is retiring on 15 December 2006. Sue was born in 1943. She has no eligible prior service.

a. Calculate Sue's annual leave accrual for 2006 and the payment in lieu. She currently has a balance of 120 hours.

$$\text{pro-rata credit} \quad \frac{36.75 \times 349 \times 4}{365} = 140 \text{ hours } 33 \text{ minutes} \quad \text{or } 140.5562$$

$$\text{total credit is } 140.5562 + 120 = 260.5562$$

$$\text{Payment in lieu: } \$49,500 \times 12 \div 313 \div 73.5 \times 260.5562 = \mathbf{\$6,727.54}$$

b. Is she entitled to a payment in lieu of LSL? If so, calculate her entitlement and payment in lieu.

Yes, as Sue is over 55 year of age and has completed over 1 year of service. She is entitled to payment in lieu of LSL under the age retirement provisions.

Dates of service	1.12.04 to 15.12.06
Completed years & months	2 years 0 months = 2.0 years
LSL entitlement	2.0 x 0.3 = 0.6 months
LSL payment in lieu	$\frac{49500}{12} \times 0.6 = \mathbf{\$2,475.00}$

**Exercise 11**

<b>a</b>	Salary	EL2 \$87,067 pa	\$	3,338.03	
	Tax	Tax free threshold no leave loading	\$	848.00	-
	Superannuation	CSS 5% contribution (rounded up nearest 10c)	\$	167.50	-
	Deductions	\$67.00 pf life insurance	\$	67.00	-
		\$700.00 pf mortgage	\$	700.00	-
	<b>Total Net Pay</b>		\$	<b>1,555.53</b>	
<b>b</b>	Salary	APS6 \$59,603 pa	\$	2,285.10	
	Tax	Tax free threshold no LL, plus HELP	\$	628.00	-
	Superannuation	PSS 5% contribution	\$	114.62	-
	Deductions	\$66.90 pf health insurance	\$	66.90	-
	<b>Total Net Pay</b>		\$	<b>1,475.58</b>	
<b>c</b>	Salary	APS4 \$46,770 pa	\$	1,793.10	
	Overtime	3 hrs on a Sunday (36 ¾ hr/wk) O/T @ x 2	\$	146.38	+
	Gross		\$	1,939.48	
	Tax	Tax free threshold no LL, plus SFSS	\$	412.00	-
	Superannuation	PSS 2% contribution	\$	35.98	-
	Deductions	\$12.50 pf insurance	\$	12.50	-
	<b>Total Net Pay</b>		\$	<b>1,479.00</b>	



d	Salary	APS 5 \$52,650	\$	2,018.53	
	Tax	Tax free threshold no LL	\$	400.00	-
	Superannuation	PSS 8% on a salary of \$47,500	\$	146.15	-
	Deductions	\$250 savings account	\$	250.00	-
	<b>Total Net Pay</b>		\$	<b>1,222.38</b>	
e	Salary	SES 1 \$135,950	\$	5,212.14	
	Tax	Tax free threshold no LL (More than \$5000 withhold \$1538 + excess earnings are taxed @ 41.5% for each \$1 over \$5000) – therefore: \$1538 + (\$212 taxed @ 0.415 = \$88)	\$	1,626.00	-
	Superannuation	CSS 10% on a salary of \$115,500	\$	444.40	-
	Deductions	\$850 rent	\$	850.00	-
	<b>Total Net Pay</b>		\$	<b>2,291.74</b>	





## Personnel Calculations & Conversions – Additional Exercises

### Exercise 1

Find 17.5% of \$1500 - \$262.50

Find 4% of \$55,000 - \$2200

### Exercise 2

Round the following 39.627594

= 39.63	(2 decimal places)
= 39.628	(3 decimal places)
= 39.6276	(4 decimal places)
= 39.62769	(5 decimal places)

### Exercise 3

- a. An employee has 136.5 hours of accrued annual leave. How many weeks, days, hours and minutes is this? The employee works 7:21/day.

18.93 days - 3 weeks 3 days ~~5 mins~~ 4 hours 10 mins  
~~6 hours 43 mins~~

- b. An employee has 310 hours of accrued annual leave. How many weeks, days, hours and minutes is this?

42.17 days  
 8 weeks 2 days 1 hour 18 mins

### Exercise 4

- a. How many week days and calendar days are there from Tuesday 8 August 2006 to Wednesday 30 August 2006 inclusive?

17 week days  
 23 calendar days

- b. Defer an increment that was due on 22 August 2006 by 39 calendar days.

29 September 2006 X 30/09/2006



**Exercise 5**

Using the BODMAS rule work out the answer to the following to 2 decimal places:

$$6 \div (2 + 5) \times 9 = 10.41$$

$$2 + 5 = 7, 6 \div 7 \times 9 = 7.71$$

**Exercise 6**

Using the BODMAS rule, calculate the answer to the following: *Always decimal by dollar and cents.*

$$\frac{53000}{180} \times \left[ \frac{7023(180+9)}{11234} - 9 \right]$$

Only to 2 decimal places

$$294.444 \times \left[ \frac{7023 \times 189}{11234} - 9 \right]$$

$$294.444 \times \left[ \frac{1327347}{11234} - 9 \right]$$

$$294.444 \times 118.5 (\text{ignore decimal}) - 9 = 34735.39$$

$$294.444 \times 109 = 32094.39$$

$$32,093.96$$

**Exercise 7**

a. What is the fortnightly salary for an employee receiving \$35,667 per annum?

$$\$1367.42 \quad \checkmark$$

b. What is the hourly rate for an employee earning \$43,269 per annum?

$$\$22.50 \quad \checkmark$$

**Exercise 8**

a. Calculate a 9% CSS contribution on a salary of \$67,223

$$\$232.695$$

$$\underline{\$232.70} \quad (\text{rounded up to next 10 cents / nearest cent})$$

$$67,223 \div 26 \times 0.09 = \$232.275$$

$$= \$232.30 (\text{rounded})$$

$$= 232.70$$

b. Calculate a 4% PSS contribution on a salary of \$47,899

$$\$73.69076$$

$$= \$73.69 \quad (\text{rounded to nearest cent})$$



**Exercise 9**

- a. How much annual leave will an ongoing employee accrue for the period 15 September 2006 to 31 December 2006?

$$\frac{36.75 \times 108 \times 4}{365} = 43.4958$$

43 hrs 29 mins

6. How much annual leave will an <sup>ongoing</sup> employee accrue for the period 12 April 2006 to 14 December 2006?

$$\frac{36.75 \times 247 \times 4}{365} = 99.4767$$

99 hrs 28 mins

**Exercise 10**

Sue Green commenced at your agency on 1 December 2004 as a full-time employee on a salary of \$49,500 pa and will be retiring on 15 December 2006. Sue was born in 1943. She has no eligible prior service. ~~01/01/2004~~ 15/12/2006

- a. Calculate Sue's annual leave accrual for 2006 and the payment in lieu. She currently has a balance of 120 hours remaining. 01/01/2006 - 15/12/2006

pro-rata credit:  $\frac{36.75 \times 348 \times 4}{365} = 140.15 = 140 \text{ hours } 9 \text{ mins}$

total credit: 120 hrs + 140 hrs 9 mins = 260 hrs 9 mins

Payment in lieu:  $\$49,500 \times 12 \div 313 \div 73.5 \times 260 \text{ hr } 9 \text{ min} = \$6717$

- b. Is she entitled to a payment in lieu of LSL? If so, calculate her LSL entitlement and payment in lieu. Yes, over 55 years

Dates of service - 01/12/2004 to 15/12/2006  
 Completed years & months 2 years 2 weeks  
 LSL entitlement 2 x 0.3 = 0.6 months  
 LSL payment in lieu  $\frac{\$49,500}{12} \times 0.6 = \$2475$



Exercise 11

<b>a</b>	Salary	EL2 \$87,067 pa	\$3338.03	
	Tax	Tax free threshold no leave loading	\$548	-
	Superannuation	CSS 5% contribution	\$167.50	-
	Deductions	\$67.00 pf life insurance	\$67.00	-
		\$700.00 pf mortgage	\$700.00	-
	<b>Total Net Pay</b>		\$1555.53	✓
<b>b</b>	Salary	APS6 \$59,603 pa	\$2285.09	
	Tax	Tax free threshold no LL, HELP	\$628	-
	Superannuation	PSS 5% contribution	\$114.62	-
	Deductions	\$66.90 pf health insurance	\$66.90	-
	<b>Total Net Pay</b>		\$1475.57	✓
<b>c</b>	Salary	APS4 \$46,770 pa	\$1793.09	
	Overtime	3 hrs on a Sunday (36 3/4 hr/wk)	\$146.37	+
	Gross		\$1939.46	
	Tax	Tax free threshold no LL, SFSS	\$412	-
	Superannuation	PSS 2% contribution	\$35.97	-
	Deductions	\$12.50 pf insurance	\$12.50	-
	<b>Total Net Pay</b>		\$1478.99	1479 ✓
<b>d</b>	Salary	APS 5 \$52,650	\$2018.53	
	Tax	Tax free threshold no LL	\$400	
	Superannuation	PSS 8% on a salary of \$47,500	\$162146.15	
	Deductions	\$250 savings account	\$250	
	<b>Total Net Pay</b>		\$1206.53	1222.38 ✓
<b>e</b>	Salary	SES 1 \$135,950	\$5212.14	
	Tax	Tax free threshold no LL	\$1625.98	1626.00
	Superannuation	CSS 10% on a salary of \$115,500	\$444.48	
	Deductions	\$850 rent	\$850	
	<b>Total Net Pay</b>		<del>\$2241.93</del>	
			\$2291.74	

\$1,538  
~~\$1,544~~  
 \$2123  
 0.145  
 87.98

