## Learning outcomes: Lesson 4 Getting ready to invest

## Students

Calculate rates of return on various investments.

- Identify opportunities to reduce discretionary spending and uses this information to create savings goals and make investment decisions.

This lesson has a strong numeracy focus with students learning about the importance of saving and investing. Students learn about the different types of investments available to them and the considerations they need to make when making investment decisions. They explore the ideas of risk and return with consideration of the importance of capital growth and return through dividend income.

## General Capabilities related to this lesson

- Numeracy
- Critical and Creative Thinking

Personal and Social Capability
Terminology
(Skill Directives)
Calculate - Ascertain/determine from given facts, figures or information.
Identify - Recognise and name; Establish or indicate who or what someone or something is.

## Links to Curriculum

Australian Curriculum
Subject: Economics and Business

- Year 7
- Year 8
- Year 9
- Year 10

Subject: Mathematics

- Year 7
- Year 8
- Year 9
- Year 10


## NSW

Subject: Commerce

- Core 1: Consumer and Financial Decisions
Core 2: Economic and Business Environment
Option 1: Our Economy
- Option 2: Investing
- Option 7: Towards Independence

Subject: Stage 5 Mathematics
5.1: Financial Mathematics
5.2: Financial Mathematics

## Glossary

Investing
Using money to buy something that has the potential to make more money.

## Savings

Putting money away and not spending it.

## Realised loss

When an asset is sold for a price below the price it was paid for initially.

## Tenants

People who have a right to use a property in exchange for a payment of rent.

## Leases

Allowing someone to rent something, usually property and expecting a regular payment as a result for its use.

## Budget

Is a personal plan for managing money including possible income and spending.

## Risk

The possibility of losing money on an investment.

## Credit union

A financial organisation, much like a bank but instead of being owned by shareholders, it is owned by its members who are usually its customers.

## Diversification

A strategy that mixes a wide variety of investments within a portfolio for the purpose of minimising risk.

## Inflation

The rise in prices of goods and services over time despite the inputs to those goods remaining the same.

## Terms and conditions

The rules agreed to before the use of certain products or services.

## Return

The amount of money made on an investment relative to how much the initial investment was worth.

## Compounding

The process whereby the amount of money that is made on an investment is added to the initial investment, and then reinvested again to make even more money.

## Reinvesting

Adding money made by an investment back into the investment.

## ASIC

Australian Security and Investments Commission is the government organization responsible for overseeing financial transactions, investment, and business operations.

## Learning outcomes: Lesson 4 Solutions

## Activity 1

Refer to the example above and then calculate the return if the $\$ 605$ is reinvested for a further year at a rate of $10 \%$ Answer: $\$ 605 \times 10 \%=\$ 60.50 \quad \$ 605+\$ 60.5=\$ 665.50$

Identify a savings goal. This should be a number figure.
Example: I would like to save $\$ 3,000$ to buy a car when I turn 17 and get my car licence.
I would like to save $\$ 1,000$ to invest in shares on the ASX.
I would like to save \$5,000 to take a holiday to Thailand when I finish school.

Create a budget to save for your future investment in shares:

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income | \$800 | \$230 | \$560 | \$160 | \$480 | \$250 | \$750 | \$310 | \$80 | \$165 | \$390 | \$760 |
| Expenditure | \$600 | \$250 | \$220 | \$420 | \$240 | \$140 | \$260 | \$120 | \$120 | \$160 | \$280 | \$190 |
| Surplus/(Deficit) | \$200 | -\$20 | \$340 | -\$260 | \$240 | \$110 | \$490 | \$190 | -\$40 | \$5 | \$110 | \$570 |

Total Surplus or Deficit for the year:
$\$ 200+(-\$ 20)+\$ 340+(-\$ 260)+\$ 240+\$ 110+\$ 490+\$ 190+(-\$ 40)+\$ 5+\$ 110+\$ 570=\$ 1,935$
Identify the discretionary spending that can be reduced throughout the year to enable a greater surplus.
Example: I will reduce the amount of money I spend at the canteen, clothing, going to the cinema and other fun activities.

## Activity 2

| Date | Dec 21 | Jan 22 | Feb 22 | Mar 22 | Apr 22 | May 22 | Jun 22 | Jul 22 | Aug 22 | Sep 22 | Oct 22 | Nov 22 | Dec 22 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Closing share price (\$) | $\$ 92.90$ | $\$ 81.15$ | $\$ 79.59$ | $\$ 81.15$ | $\$ 86.67$ | $\$ 80.80$ | $\$ 81.71$ | $\$ 88.26$ | $\$ 78.45$ | $\$ 71.76$ | $\$ 67.70$ | $\$ 70.47$ | $\$ 68.02$ |

1. Calculate the profit/loss in dollars and cents if 1000 ASX shares were purchased on 1 December 2021 and you then sold them on 1 December 2022?

Answer: 1,000 shares were purchased on 1/12/2021 for $\$ 90.37$ per share. 1,000 X $\$ 90.37=\$ 90,370$
1,000 shares were sold on 1/12/2022 for \$70.58. 1,000 X \$70.58 = \$70,580 $\$ 90,370-\$ 70,580=a$ loss of $\$ 19,790$
2. Calculate the percentage of profit/loss based on the purchase of 1,000 ASX shares were purchased on 1 December 2021 and sold on 1 December 2022? (Answer to one decimal point).
Answer: 1,000 shares were purchased on 1/12/2021 for $\$ 90.37$ per share. 1,000 X $\mathbf{\$ 9 0 . 3 7 = \$ 9 0 , 3 7 0}$ 1,000 shares were sold on 1/12/2022 for \$70.58. 1,000 X \$70.58=\$70,580 $(\$ 70,580-\$ 90,370) / \$ 70,580=(-0.28) \times 100=-28.0 \%$ (loss)
3. During 2021 ASX paid two dividends. In March it paid $\$ 1.12$ per share and in September paid $\$ 1.11$ per share. If 200 ASX shares are held, calculate how much dividend income would have been received in 2021 in total?
Answer: March $\$ 1.12 \times 200=\$ 224$
September $\$ 1.11 \times 200=\$ 222$
Total for $2021=\$ 224+\$ 222=\$ 446$

