

Boost Free Lessons - Year 9 Maths

Lesson 19: Simple Interest

Name: _____ Grade: _____ Date: _____

Worked Example 1

Find the simple interest earned on \$4 000 invested at 5% per annum for 3 years.

1. Use $I = PRT$, where P is the principal, R is the rate as a decimal and T is the time in years.
2. Convert the rate: $5\% = 0.05$.
3. $I = 4\,000 \times 0.05 \times 3$.
4. $4\,000 \times 0.05 = 200$, and $200 \times 3 = 600$.

$I = \$600$

Worked Example 2

A loan of \$12 000 is charged 7% per annum simple interest for 4 years. Find the total amount to repay.

1. First find the interest: $I = 12\,000 \times 0.07 \times 4$.
2. $12\,000 \times 0.07 = 840$, and $840 \times 4 = 3\,360$.
3. The total to repay is the principal plus the interest.
4. $12\,000 + 3\,360 = 15\,360$.

Total = \$15 360

Remember: $I = PRT$. Convert the rate to a decimal by dividing by 100, and make sure the time is in years before substituting. The **total** amount is the principal plus the interest.



Question 1: Find the simple interest in each case.

1. $P = \$1\,000$, $R = 5\%$, $T = 2$ years

2. $P = \$2\,000$, $R = 4\%$, $T = 3$ years

3. $P = \$5\,000$, $R = 6\%$, $T = 1$ year

4. $P = \$800$, $R = 10\%$, $T = 5$ years

5. $P = \$15\,000$, $R = 3\%$, $T = 4$ years

6. $P = \$600$, $R = 8\%$, $T = 2$ years

7. $P = \$2\,500$, $R = 7\%$, $T = 3$ years

8. $P = \$10\,000$, $R = 2.5\%$, $T = 6$ years



Question 2: Answer the following questions.

1. $P = \$3\,000$, $R = 5\%$, $T = 4$ years. Find the total amount.

2. $P = \$8\,000$, $R = 6\%$, $T = 2.5$ years. Find the interest.

3. $P = \$1\,200$, $R = 9\%$, $T = 6$ months. Find the interest.

4. Interest of \$450 was earned on \$3 000 over 3 years. Find the rate.

5. \$500 earns \$75 interest at 5% per annum. Find the time in years.

6. $P = \$20\,000$, $R = 4.5\%$, $T = 2$ years. Find the total amount.



Question 3: Answer the following questions.

1. Ella invests \$6 000 at 4% per annum simple interest for 5 years. How much interest does she earn?
2. Using the same investment, what is the total value after 5 years?
3. A loan of \$9 000 at 8% per annum is repaid after 18 months. Find the interest charged.
4. How long does \$2 000 take to earn \$400 in interest at 5% per annum?
5. Which earns more interest: \$5 000 at 6% for 3 years, or \$9 000 at 5% for 2 years?





Every student has gaps. The hard part is knowing exactly where they are.
That is what a Boost assessment is for.

Book a Free Assessment

Normally valued at \$199, free for new families

- A friendly skills check aligned to the NSW syllabus
- Face to face with our qualified tutors
- A clear picture of your child's strengths and gaps
- A weekly plan built around what they actually need

Book a Free Assessment →

boosttutoring.com.au/contact



Answers: Simple Interest

Question 1

- | | |
|----------|------------|
| 1. \$100 | 5. \$1 800 |
| 2. \$240 | 6. \$96 |
| 3. \$300 | 7. \$525 |
| 4. \$400 | 8. \$1 500 |

Question 2

- | | |
|------------|-------------|
| 1. \$3 600 | 4. 5% |
| 2. \$1 200 | 5. 3 years |
| 3. \$54 | 6. \$21 800 |

Question 3

1. \$1 200
2. \$7 200
3. \$1 080
4. 4 years
5. They are equal. Both earn \$900 in interest.

