

## Simple and compound interest

## Use compound interest to find the total value of the investment after the time given.

1) \$540 at 3.2% compounded

monthly for  $6\frac{5}{12}$  years

2) \$36,100 at 4% compounded monthly for 7 years

3) \$54,200 at 1.4% compounded quarterly for 9 years

4) \$4,000 at 13% compounded monthly for  $2\frac{3}{4}$  years

5) \$49,000 at 6.8% compounded monthly for 10 years

6) \$43,900 at 12.2% compounded quarterly for 3 years

7) \$1,900 at 2.4% compounded quarterly for  $\frac{1}{2}$  years 8) \$56,700 at 1% compounded monthly for 3 years

9) \$51,600 at 16% compounded monthly for 7 years

10) \$9,600 at 3.4% compounded quarterly for 4 years

11) \$4,500 at 8.8% compounded semiannually for  $1\frac{1}{2}$  years 12) \$59,300 at 14.1% compounded quarterly for  $2\frac{1}{2}$  years

13) \$17,300 at 4.4% compounded semiannually for 8 years

14) \$12,200 at 13% compounded semiannually for 2 years

15) \$320 at 4.1% compounded semiannually for  $\frac{1}{2}$  years 16) \$475 at 12% compounded quarterly for 4 years

17) \$1,190 at 4.2% compounded quarterly for 6 years

18) \$380 at 4.3% compounded quarterly for  $\frac{1}{4}$  years

19) \$22,000 at 1.1% compounded quarterly for 2 years

20) \$300 at 4.3% compounded quarterly for  $\frac{1}{4}$  years

21) \$43,000 at 10.3% compounded semiannually for  $\frac{1}{2}$  years 22) \$19,000 at 15% compounded quarterly for  $7\frac{1}{2}$  years

24) \$39,000 at 9.1% compounded semiannually for  $1\frac{1}{2}$  years

23) \$620 at 12% compounded semiannually for  $\frac{1}{2}$  years

25) \$1,330 at 4.7% compounded semiannually for 8 years

26) \$60,000 at 3.2% compounded monthly for  $2\frac{1}{3}$  years

27) \$280 at 4.7% compounded semiannually for 1 year

28) \$20,000 at 12.5% compounded monthly for  $1\frac{1}{4}$  years

29) \$56,000 at 2.1% compounded semiannually for 1 year

30) \$430 at 5% compounded monthly for  $\frac{1}{6}$  years

## Answers to Simple and compound interest

| 1) \$662.90     | 2) \$47,742.75  | 3) \$61,464.57  | 4) \$5,708.02   |
|-----------------|-----------------|-----------------|-----------------|
| 5) \$96,534.54  | 6) \$62,956.49  | 7) \$1,922.87   | 8) \$58,426.04  |
| 9) \$156,980.36 | 10) \$10,992.23 | 11) \$5,120.52  | 12) \$83,850.78 |
| 13) \$24,505.32 | 14) \$15,694.89 | 15) \$326.56    | 16) \$762.24    |
| 17) \$1,529.04  | 18) \$384.09    | 19) \$22,488.68 | 20) \$303.23    |
| 21) \$45,214.50 | 22) \$57,331.96 | 23) \$657.20    | 24) \$44,569.39 |
| 25) \$1,928.67  | 26) \$64,645.07 | 27) \$293.31    | 28) \$23,363.48 |
| 29) \$57,182.17 | 30) \$433.59    |                 |                 |