

Effect Rate of Interest

Give your answers for Q1-Q7 to 1 decimal place.

- 1) What effective rate of interest per year is equivalent to an effective rate of interest of:
 - a. 3% per month?
 - b. 4% per month?
 - c. 0.35% per month?
 - d. 20% per month?

- 2) What effective rate of interest per month is equivalent to an effective rate of interest of:
 - a) 3% per year?
 - b) 7% per year?
 - c) 2.45% per year?

- 3) What effective rate of interest per half year is equivalent to an effective rate of interest of:
 - a) 3% per quarter year?
 - b) 11% per quarter year?

- 4) What effective rate of interest per 3.2 years is equivalent to an effective rate of interest 0.4% per quarter year?

- 5) What effective rate of interest per 4.5 years is equivalent to an effective rate of interest 0.31% per quarter year?

- 6) What effective rate of interest per 2.34 years is equivalent to an effective rate of interest 1% per quarter year?

- 7) What effective rate of interest per 10 years is equivalent to an effective rate of interest 5% per 2.4 years?

8) Which of the below is the highest effective rate of interest:

- a) 4% per year;
- b) 0.31% per month;
- c) 1.999% per half year?

9) Which of the below is the highest effective rate of interest:

- a) 6% per year;
- b) 0.55% per month;
- c) 2.3% per half year?

10) Which of the below is the highest effective rate of interest:

- a) 59% per year;
- b) 4% per month;
- c) 30% per half year?

11) If we invest £50 in a bank account at an effective rate of interest of 4% per year, how much is in the account after 1 year?

12) If we invest £134 in a bank account at an effective rate of interest of 2.3% per year, how much is in the account after 4 years?

13) If we invest £999 in a bank account at an effective rate of interest of 3.4% per year, how much is in the account after 11 years?

14) If we invest £19,235 in a bank account at an effective rate of interest of 4% per year, how much is in the account after 2 years?

Answers

- 1a. 42.6%
- 1b. 60.1%
- 1c. 4.3%
- 1d. 791.6%
- 2a. 0.2%
- 2b. 0.6%
- 2c. 0.2%
- 3a. 6.1%
- 3b. 23.2%
- 4. 5.2%
- 5. 5.7%
- 6. 9.8%
- 7. 22.5%
- 8. C
- 9. B
- 10. C
- 11. £52
- 12. £146.76
- 13. £1443.08
- 14. £20804.58