

Percentage Multiplier Method, Compound Interest and Depreciation

Year 8 · Number · y8-percent-of-amount

Name: _____

Date: _____

Class: _____

Score: ____ / ____

Instructions

Answer every question in Practice. Try the Challenge section once Practice is complete. 10 questions in total.

Practice

1. Find the multiplier for a 12% increase.

2. Find the multiplier for an 8% decrease.

3. A car costs £15,000 and depreciates by 10% each year. What is its value after 1 year?

4. £2000 is invested at 5% compound interest per year. What is the value after 2 years?

5. A population of 40,000 grows by 3% per year. What is the population after 1 year, to the nearest whole number?

6. A savings account pays 6% simple interest per year on £500. How much interest is earned after 2 years?

7. Find the multiplier for a 7% increase, then use it to increase £250 by 7%.

8. Compound interest applies each year's rate to the growing balance, not the original amount. £1000 is invested at 4% compound interest for 3 years. What is the value after 3 years, to the nearest penny?

Challenge

1. £3000 is invested at 3.5% compound interest. What is the value after 4 years, to the nearest penny?

2. A car worth £25,000 depreciates by 15% per year. After how many complete years will its value first drop below £15,000?
