KEY IDEA

Common Formulas

Temperature F = degrees Fahrenheit, C = degrees Celsius

$$C = \tfrac{5}{9}(F - 32)$$

Simple Interest I = interest, P = principal,

r = annual interest rate (decimal form),

t = time (years)

$$I = Prt$$

Distance d = distance traveled, r = rate, t = time

$$d = rt$$

Solve the temperature formula for F.

Mercury 427°C

Venus 864°F

Which has the greater surface temperature: Mercury or Venus?

A fever is generally considered to be a body temperature greater than 100°F. Your friend has a temperature of 37°C. Does your friend have a fever when the temperature increases by 1°F? 1°C?

You deposit $5000 in an account that earns simple interest. After 6 months, the account earns $162.50 in interest. What is the annual interest rate?

How much money must you deposit in a simple interest account to earn $500 in interest in 5 years at 4% annual interest?

A truck driver averages 60 miles per hour while delivering freight to a customer. On the return trip, the driver averages 50 miles per hour due to construction. The total driving time is 6 hours and 36 minutes. How long does each trip take?