

6.2 Key Concepts 2 Equation of a Partial Variation Worked Example

Example: A golf club has dues of \$50 per month, plus \$30 per game. Model the monthly cost of belonging to the club with an equation.

Solution: The constant part is \$50 and the variable part is \$30 per game. The equation is $C = 50 + 30g$.

Practice:

1. A hot air balloon burns 200 L of fuel while inflating, plus 40 L per hour of flight. Model the fuel burned on a flight of h hours with an equation.

2. A bank charges \$25 to set up an investment account, plus \$20 per year in administration charges. Model the cost of maintaining the account for t years with an equation.

Answers: 1. $F = 200 + 40h$. 2. $C = 25 + 20t$.