|  |  |  |  |
| --- | --- | --- | --- |
| **Solving Percent Problems** | | | |
| Calculates a percent increase  In 2020, the price of a block of butter was $5.20.  In 2 years, the price rose by  about 11%.  What was the price of butter  in 2022?  The price of butter in 2022 is  (100% + 11%) = 111% of its price  in 2020.  So, the price of butter in 2022 is:  111% of $5.20  = 1.11 × $5.20  ≈ $5.77 | Calculates a percent decrease  In 2001, the population of polar bears was about 1500.  By 2010, the population had decreased by 40%.  What was the population of polar bears in 2010?  The population in 2010 was  (100% – 40%) = 60% of its population in 2001.  So, the population of polar bears  in 2010 was:  60% of 1500  = 0.60 × 1500  = 900 | Solves a problem involving combined percents  A person buys a Canadian flag  for $15.99.  How much would it cost in your province?  For example, in SK:  6% PST and 5% GST = 11% tax  Total cost of the flag:  111% of $15.99  = 1.11 × $15.99  ≈ $17.75 | Solves a problem involving consecutive percents  In 2015, the average price of a house in Canada was $413 000.  By 2020, this price had increased  by about 28%.  By the middle of 2022, the average price in 2020 had increased by  a further 26%.  What was the average price of  a house in June 2022?  In 2020, the price was:  128% of $413 000  = 1.28 × $413 000  = $528 640  In 2022, the price was:  126% of $528 640  = 1.26 × $528 640  = $666 086.40  The average price of a house in 2022 was about $666 000. |
| **Observations/Documentation** | | | |
|  |  |  |  |