Chapter 13

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| 1. | *What is the Fahrenheit temperature of a person with a  fever?* [1020F] |
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| 2. | *Frost damage to most plants occurs at temperatures of  or lower. What is this temperature on the Kelvin scale?* [271 K] |
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| 8. | (a) At what temperature do the Fahrenheit and Celsius scales have the same numerical value? [-40] (b) At what temperature do the Fahrenheit and Kelvin scales have the same numerical value? [575] |
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| 15. | Show that 60.0 L of gasoline originally at  will expand to 61.1 L when it warms to  as claimed in Example 13.4. Assume βgas = 950 x 10-6 [C0]-1 |
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| 18. | Most automobiles have a coolant reservoir to catch radiator fluid that may overflow when the engine is hot. A radiator is made of copper and is filled to its 16.0-L capacity when at  What volume of radiator fluid will overflow when the radiator and fluid reach their  operating temperature, given that the fluid’s volume coefficient of expansion is ? [0.475 L] |
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