Problem of the Week
Problem B
These Rates are Shocking

Most provinces take into consideration the time of day when they charge for electricity usage. The rates they charge are often referred to as Time-Of-Use (TOU) rates. Using the sample TOU rates in the table below, answer the questions that follow.

<table>
<thead>
<tr>
<th>TOU Price Period</th>
<th>November 1 - April 30 Time of Day</th>
<th>May 1 - October 31 Time of Day</th>
<th>TOU Rate (¢ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Peak Hours</td>
<td>Weekdays 7 p.m. - 7 a.m., anytime on weekends</td>
<td>Weekdays 7 p.m. - 7 a.m., anytime on weekends</td>
<td>7.4</td>
</tr>
<tr>
<td>Mid-Peak Hours</td>
<td>Weekdays 11 a.m. - 5 p.m.</td>
<td>Weekdays 7 a.m. - 11 a.m. and 5 p.m. - 7 p.m.</td>
<td>10.2</td>
</tr>
<tr>
<td>On-Peak Hours</td>
<td>Weekdays 7 a.m. - 11 a.m. and 5 p.m. - 7 p.m.</td>
<td>Weekdays 11 a.m. - 5 p.m.</td>
<td>15.1</td>
</tr>
</tbody>
</table>

(a) Garret’s family used 50 kWh on a Saturday afternoon. What would be the charge for those 50 kWh?

(b) On November 10, when would be the best time of day to run your clothes dryer?

(c) When should you avoid using your clothes dryer in the summer?

(d) What might be a better way (environmentally and financially) to dry your clothes in the summer?

(e) Ramal’s family used 1180 kWh hours of electricity in one month.

   (i) What is the maximum amount of money (in dollars) they could have paid for electricity that month?

   (ii) What is the minimum amount of money (in dollars) they could have paid for electricity that month?

**Themes**  Data Management, Number Sense