Given: \( H \equiv \frac{x^2}{a^2} - y^2 = 1 \) & \( E \equiv 3x^2 + 4y^2 = 12 \). If the length of latus rectum are equal, then find \( 12(e_P^2 + e_H^2) \).
Find $P\left(\frac{1 \leq x \leq 4}{x \leq 2}\right)$. 

<table>
<thead>
<tr>
<th>$x$</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P(x)$</td>
<td>$k$</td>
<td>$2k$</td>
<td>$3k$</td>
<td>$4k$</td>
<td>$5k$</td>
</tr>
</tbody>
</table>
Find the area between the curves $y^2 = 2x$ and $x + y = 4$.

- 10
- $\frac{11}{3}$
- 18
- $\frac{14}{3}$
Find the area between the curves $y^2 = 2x$ and $x + y = 4$.