

LESSON 2

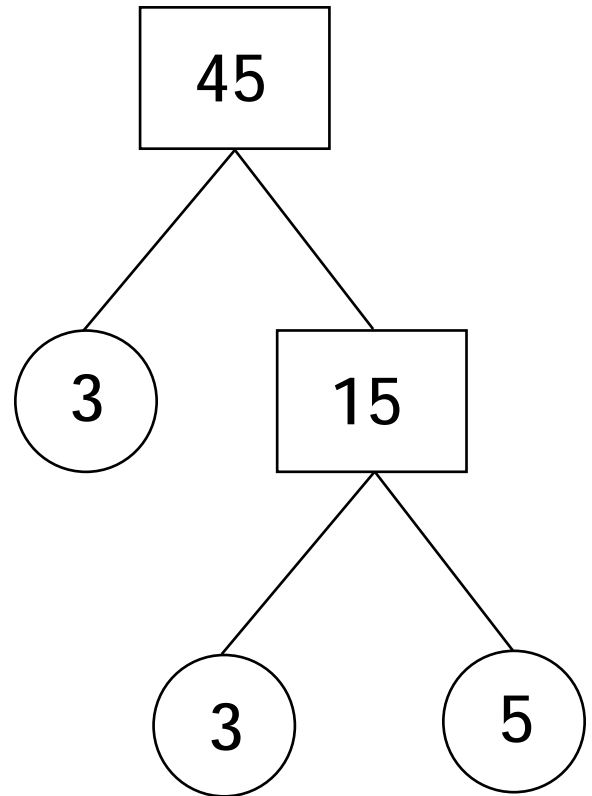
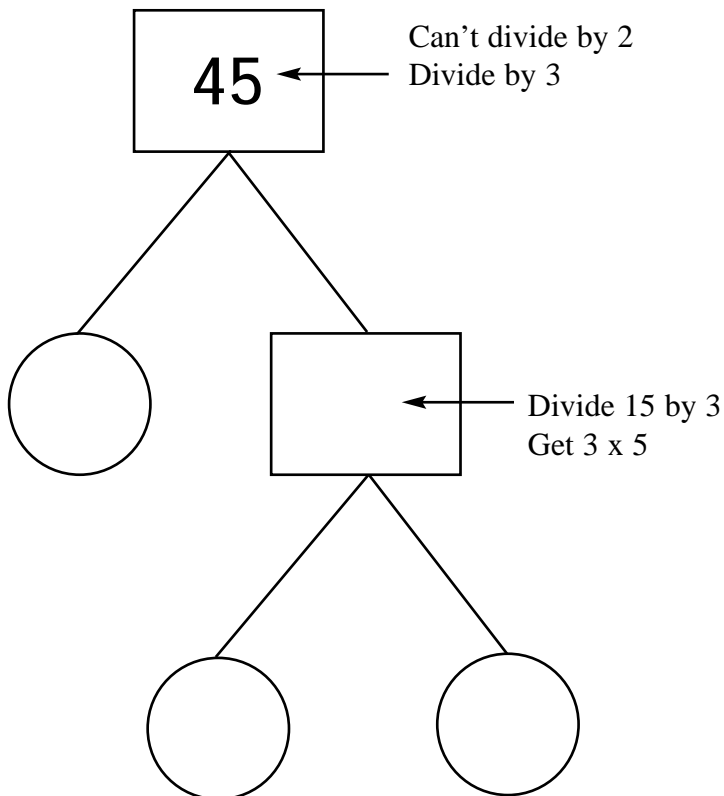
Prime Factorization Trees

The Prime Factorization of any whole number greater than “2” can be expressed using a factor tree.

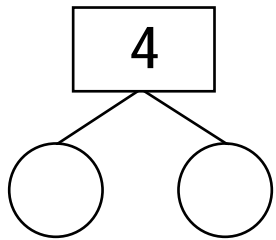
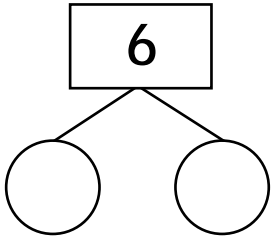
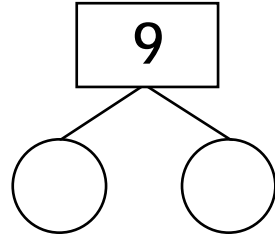
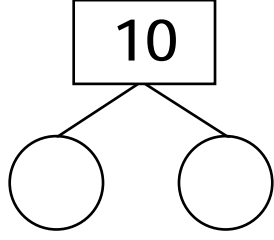
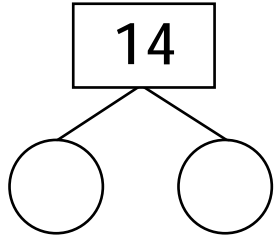
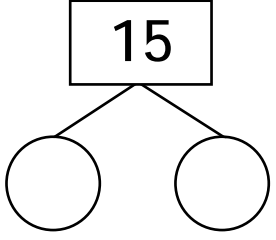
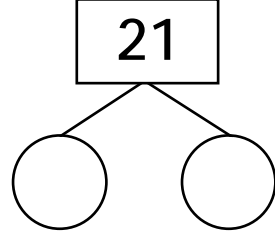
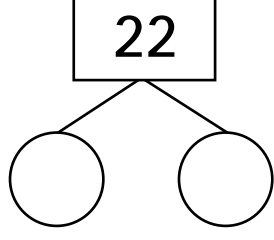
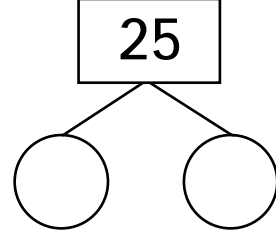
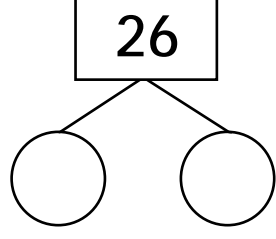
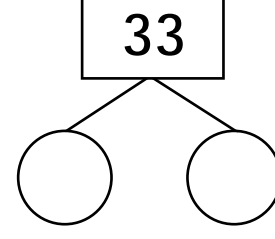
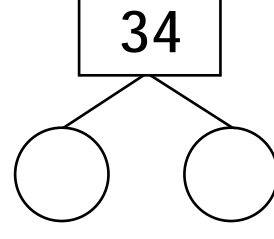
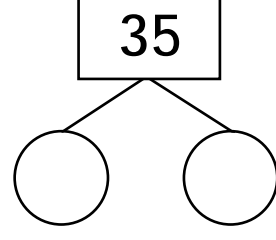
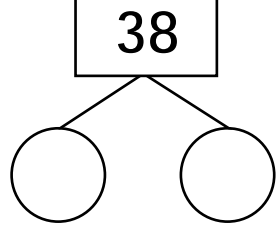
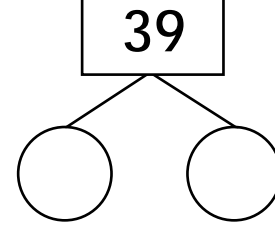
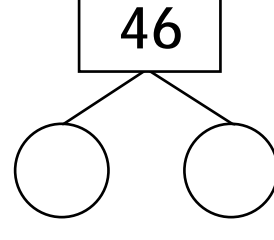
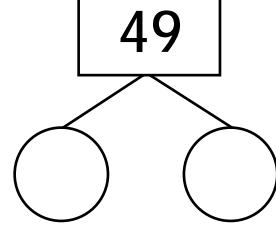
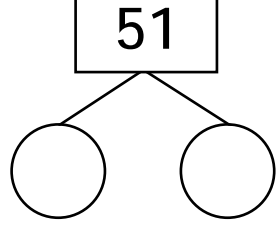
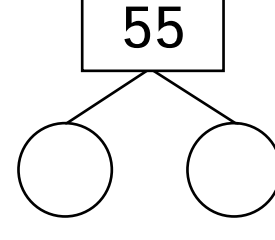
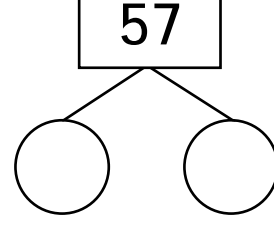
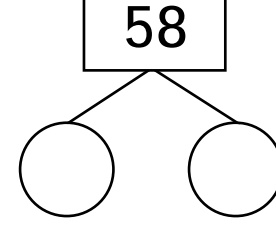
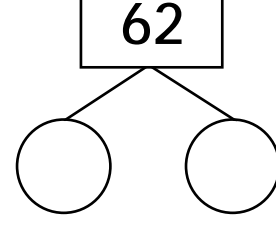
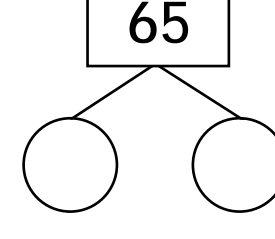
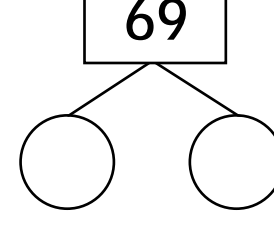
The solution of a factor tree problem requires repeated division by prime numbers. Start with the smallest prime “2” and continue dividing until this is no longer possible. Then try dividing with the next highest prime “3.” When division by “3” is no longer possible, go to the next highest prime “5” and repeat the division process. Next try 7, 11, etc.

Complete the Factor Tree:

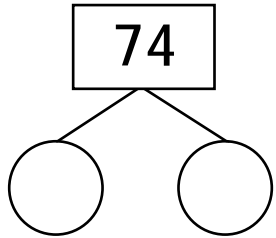
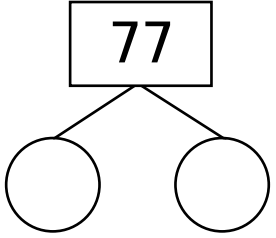
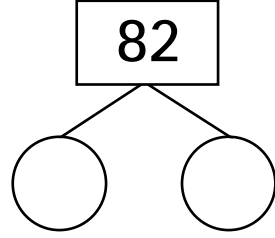
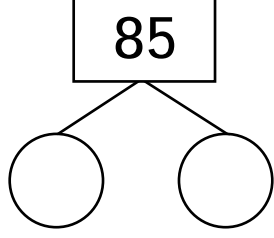
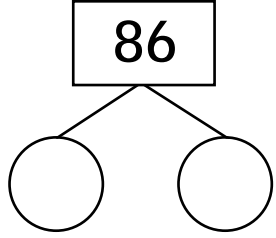
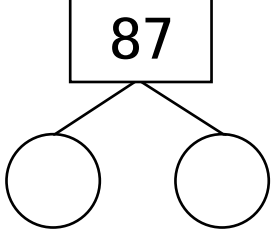
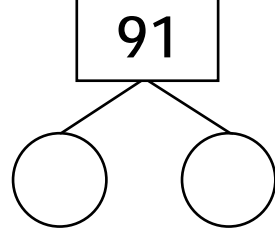
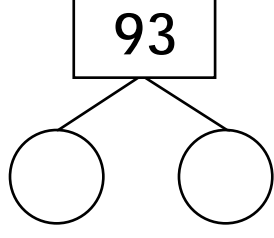
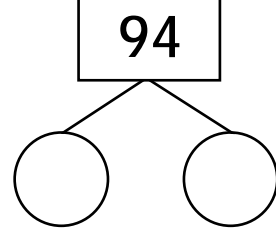
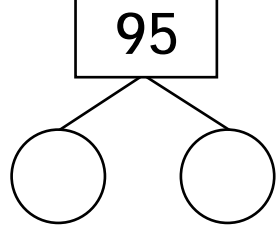
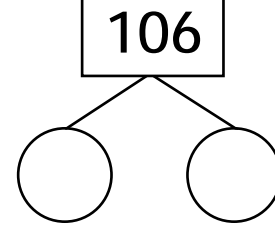
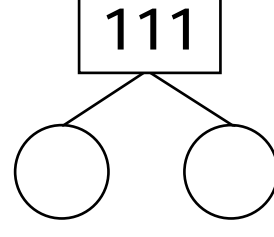
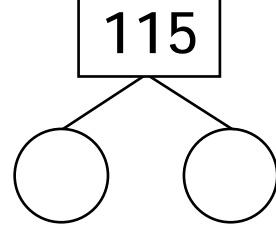
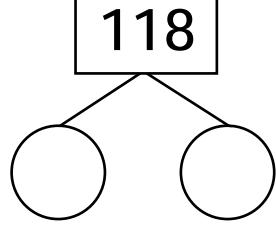
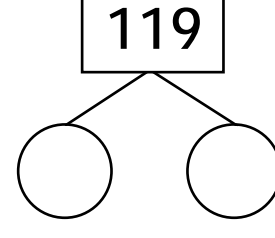
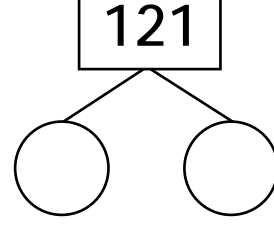
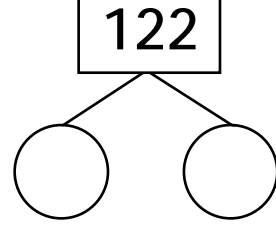
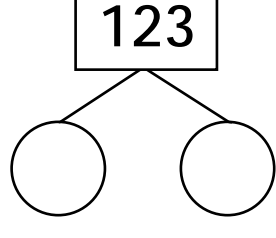
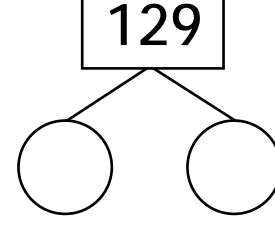
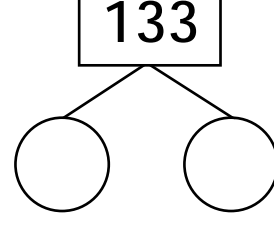
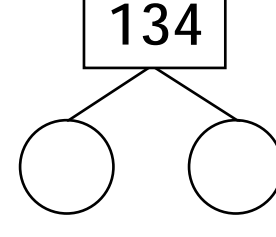
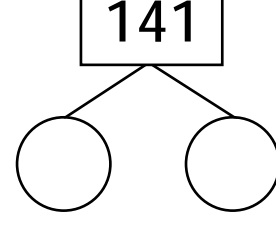
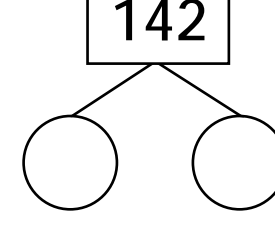
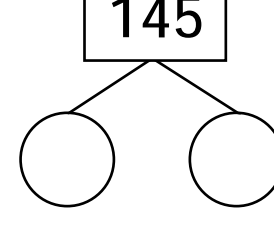
Example:



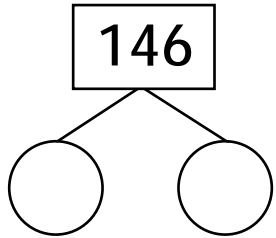
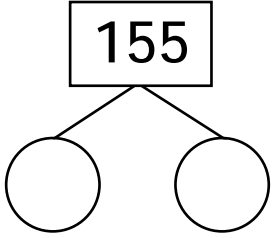
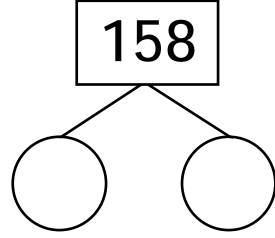
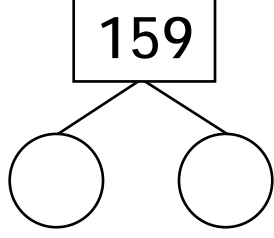
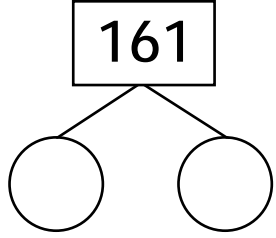
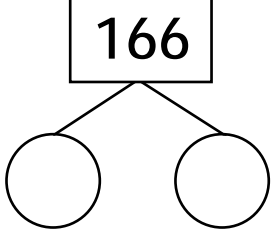
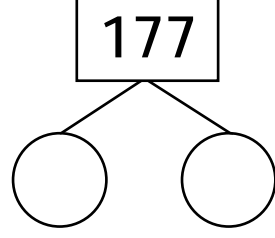
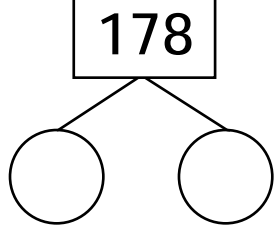
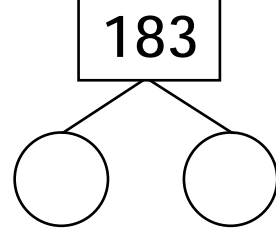
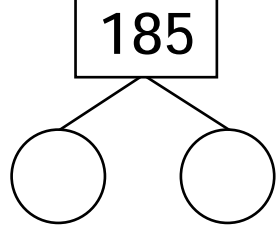
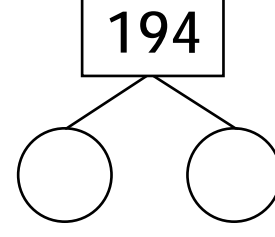
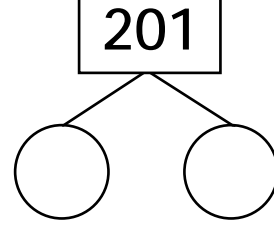
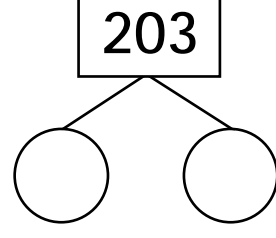
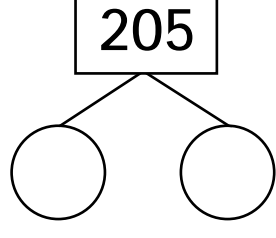
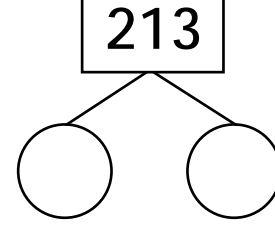
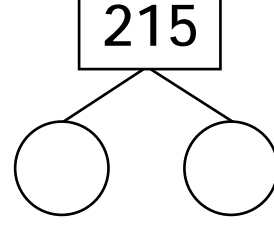
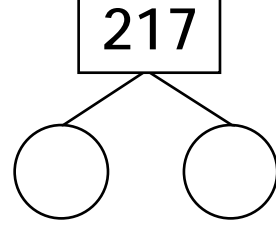
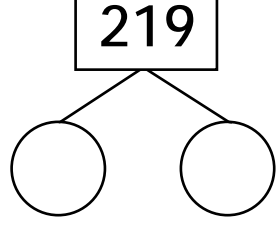
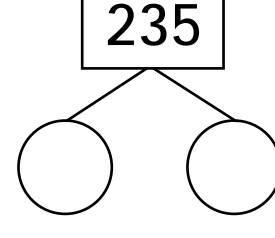
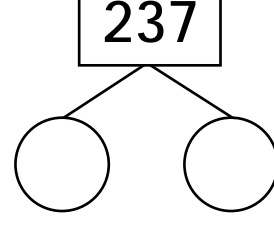
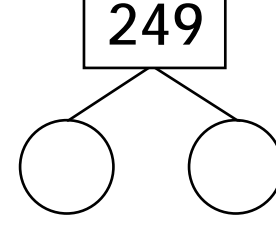
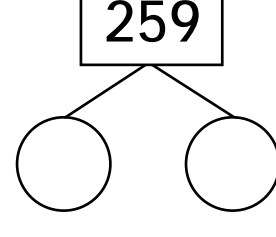
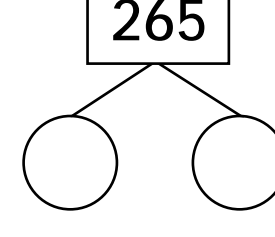
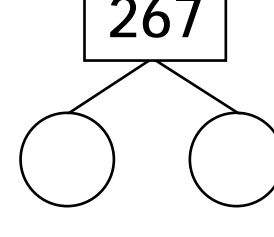
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

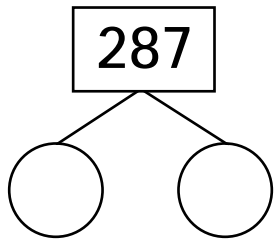
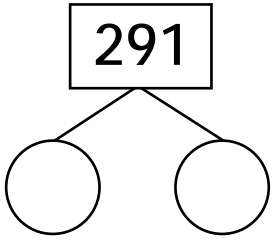
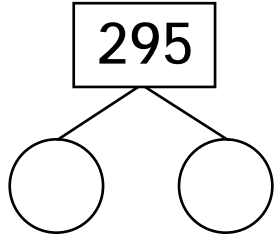
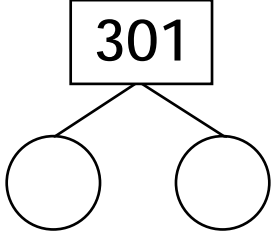
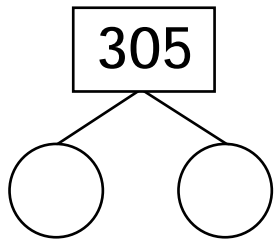
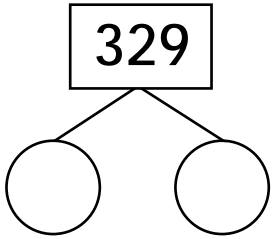
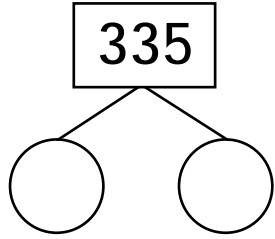
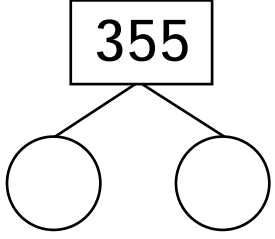
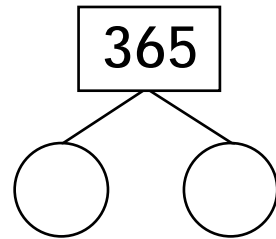
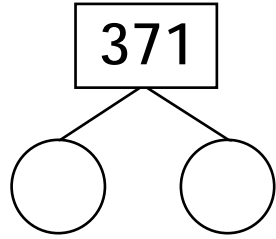
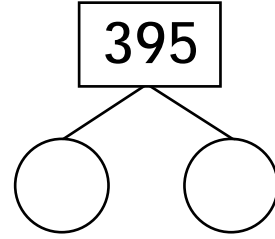
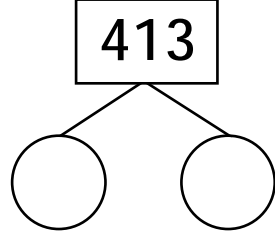
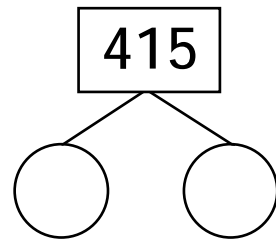
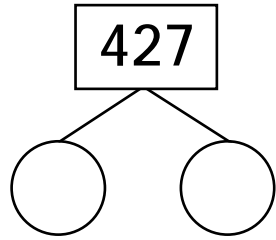
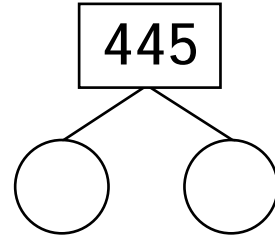
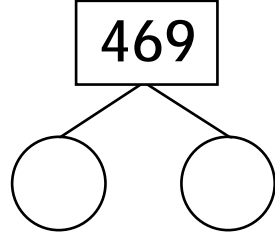
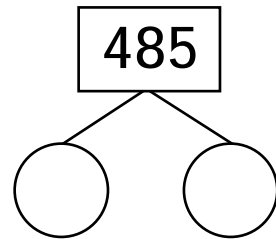
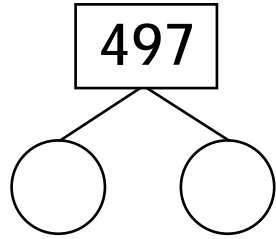
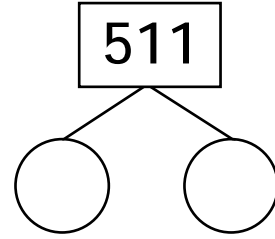
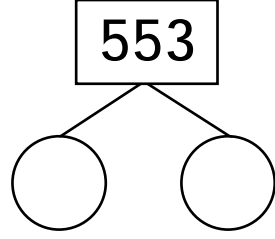
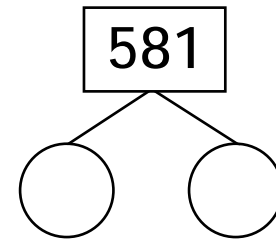
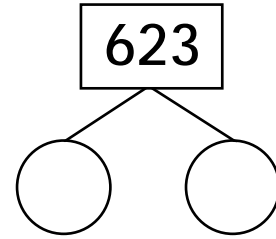
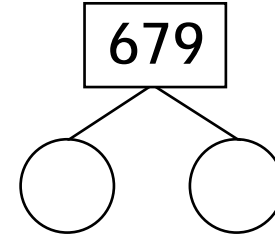
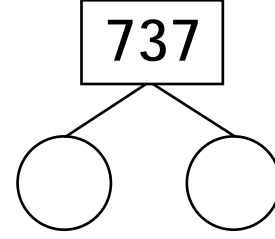
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

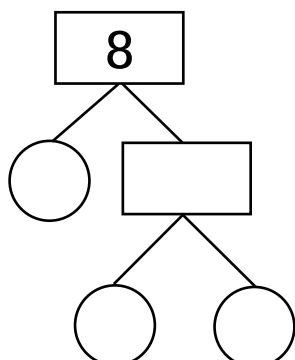
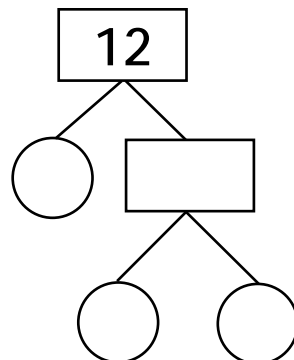
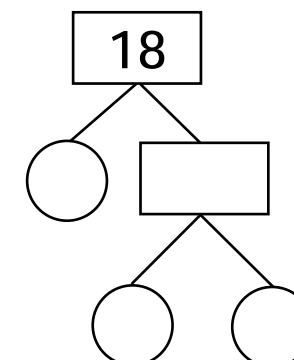
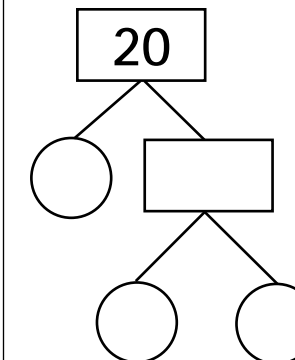
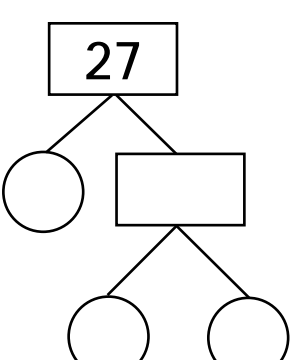
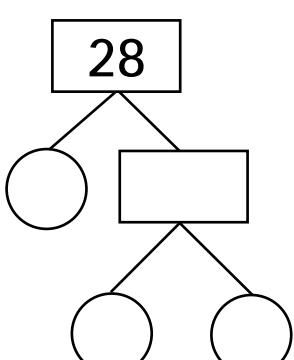
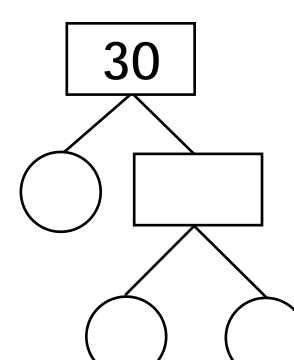
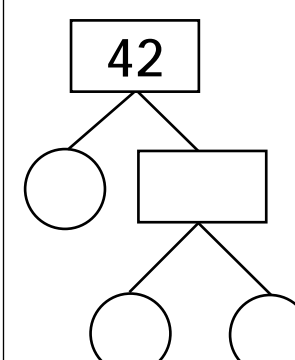
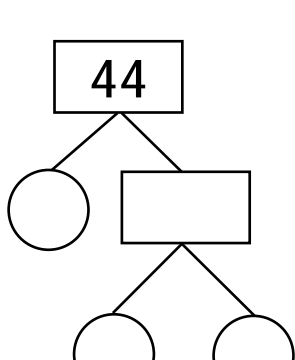
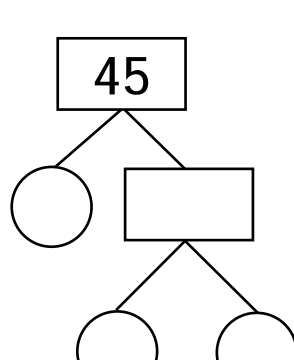
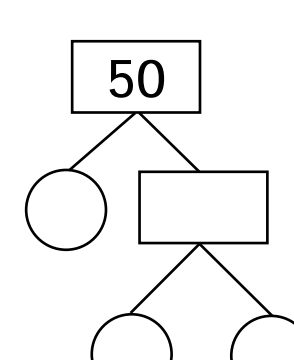
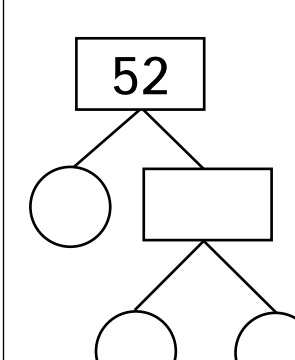
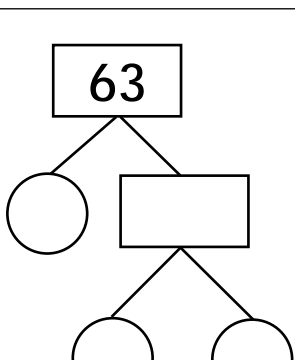
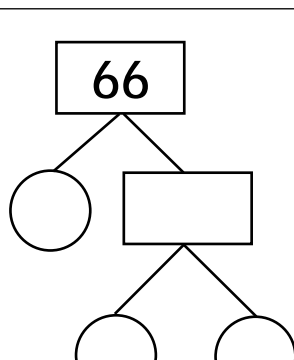
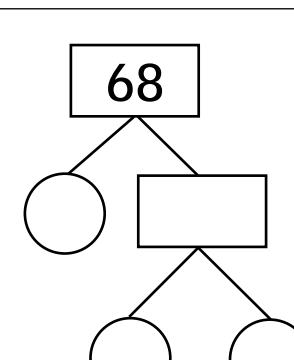
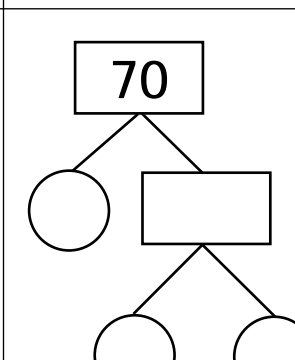
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

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<p>161</p> 	<p>166</p> 	<p>177</p> 	<p>178</p> 
<p>183</p> 	<p>185</p> 	<p>194</p> 	<p>201</p> 
<p>203</p> 	<p>205</p> 	<p>213</p> 	<p>215</p> 
<p>217</p> 	<p>219</p> 	<p>235</p> 	<p>237</p> 
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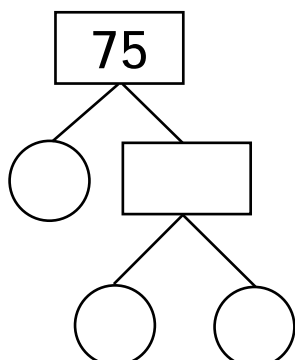
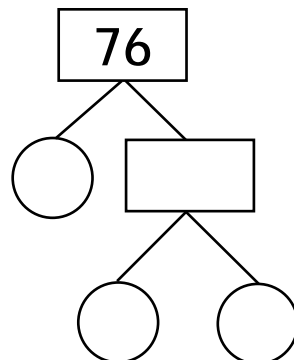
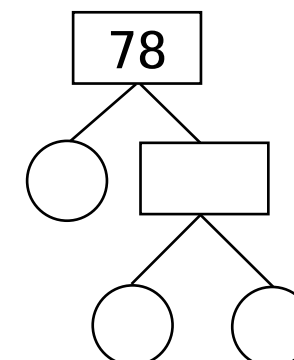
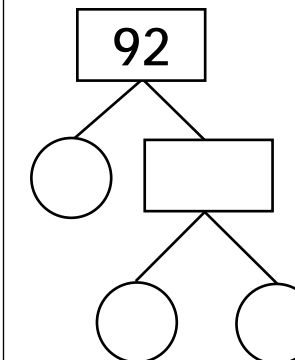
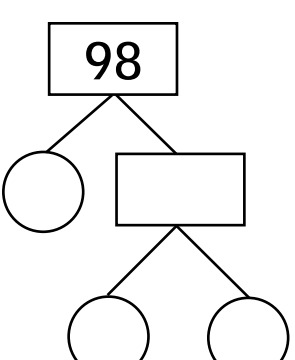
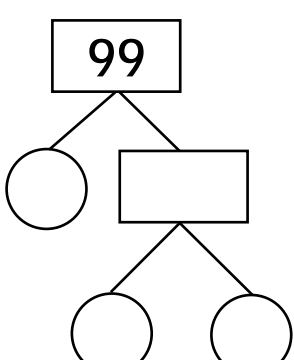
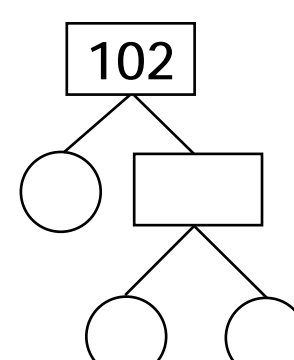
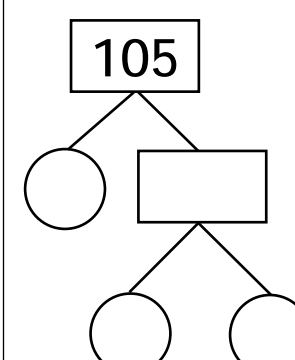
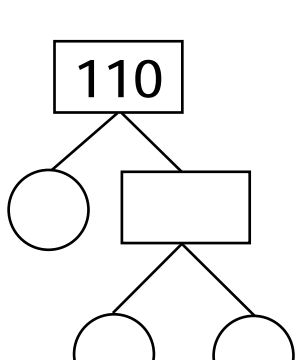
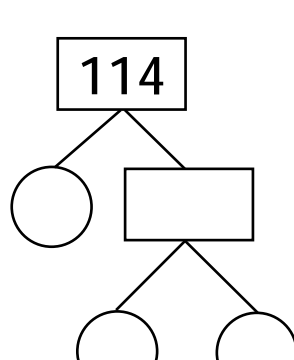
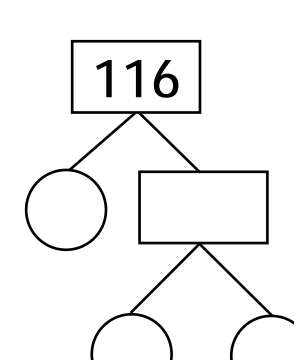
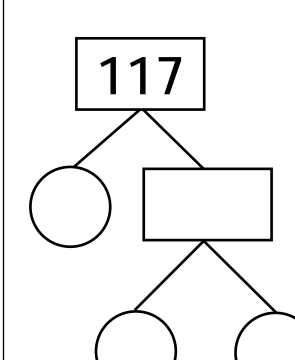
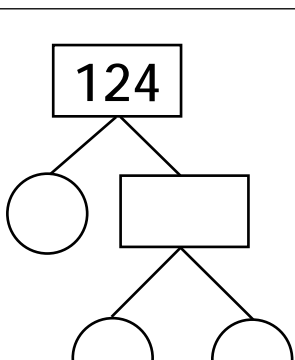
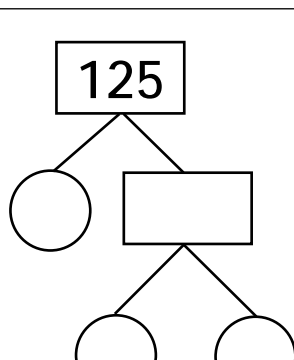
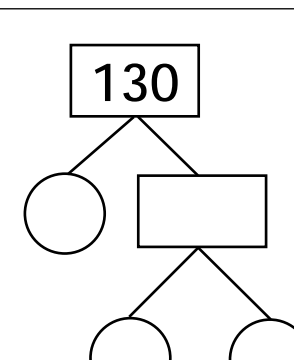
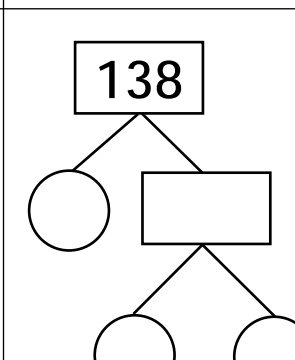
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<p>287</p> 	<p>291</p> 	<p>295</p> 	<p>301</p> 
<p>305</p> 	<p>329</p> 	<p>335</p> 	<p>355</p> 
<p>365</p> 	<p>371</p> 	<p>395</p> 	<p>413</p> 
<p>415</p> 	<p>427</p> 	<p>445</p> 	<p>469</p> 
<p>485</p> 	<p>497</p> 	<p>511</p> 	<p>553</p> 
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Complete Each Factor Tree By Dividing By The Lowest Prime Factor

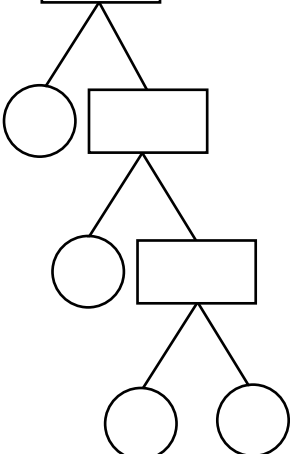
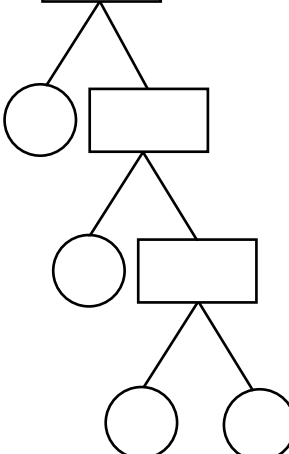
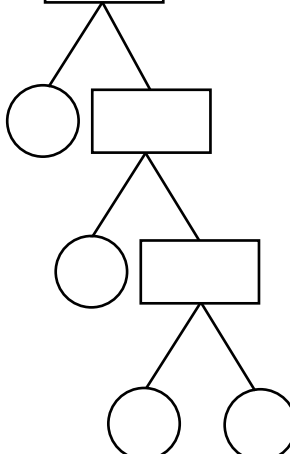
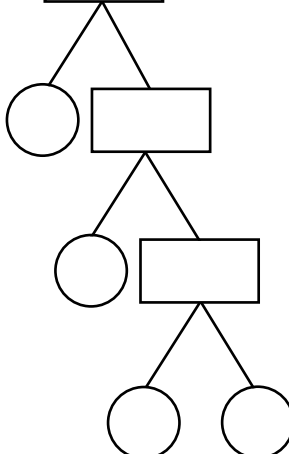
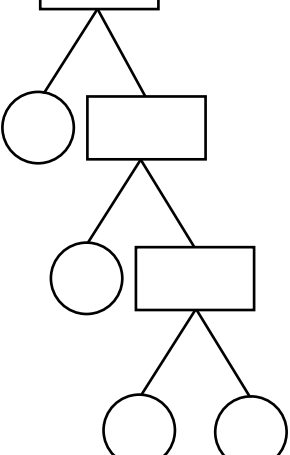
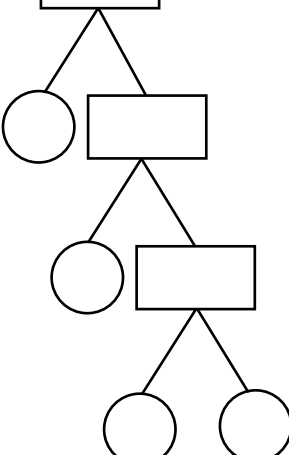
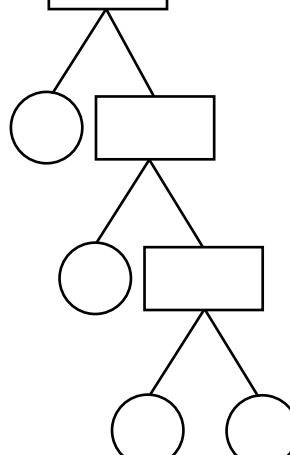
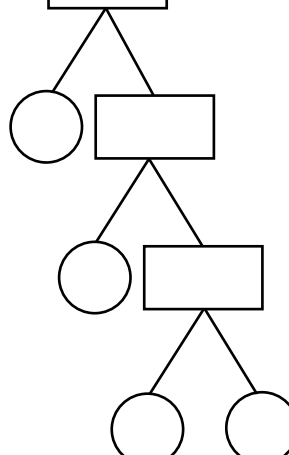
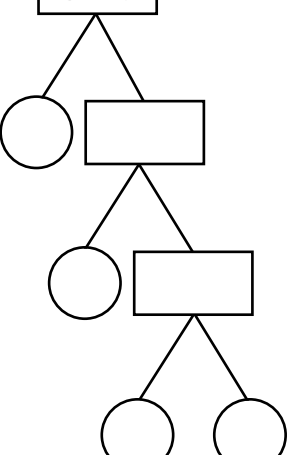
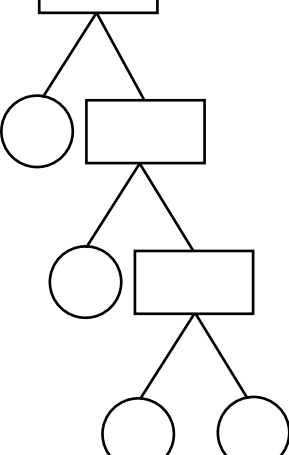
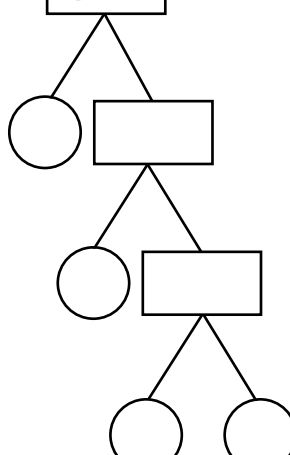
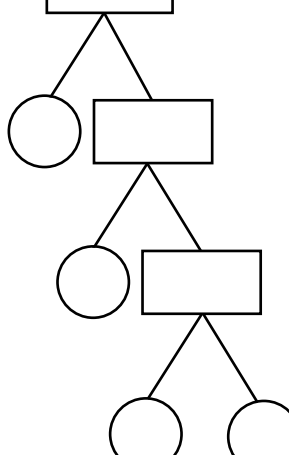
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

Complete Each Factor Tree By Dividing By The Lowest Prime Factor

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Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">104</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">126</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">132</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">135</div> 
<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">136</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">140</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">150</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">250</div> 
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Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">32</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">48</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">72</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">80</div>
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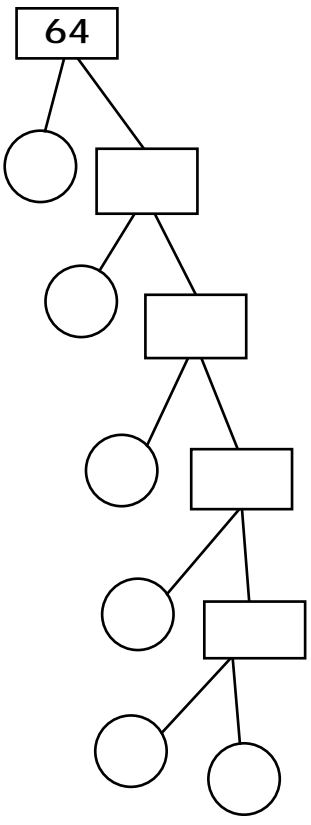
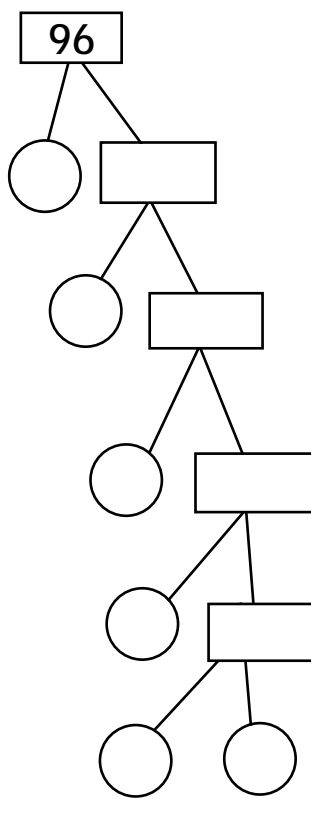
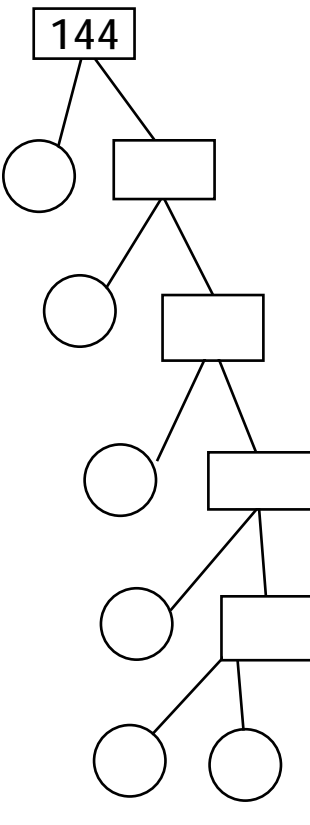
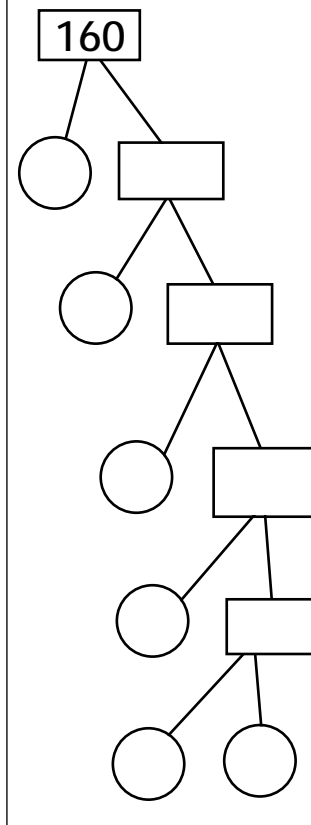
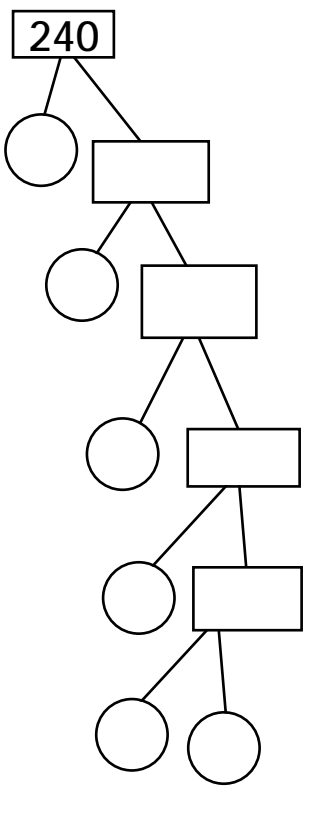
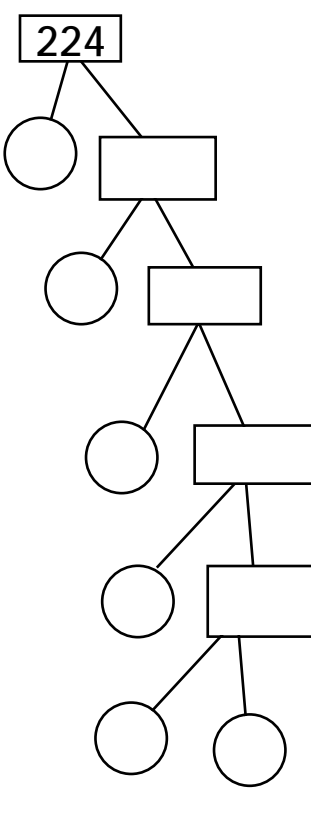
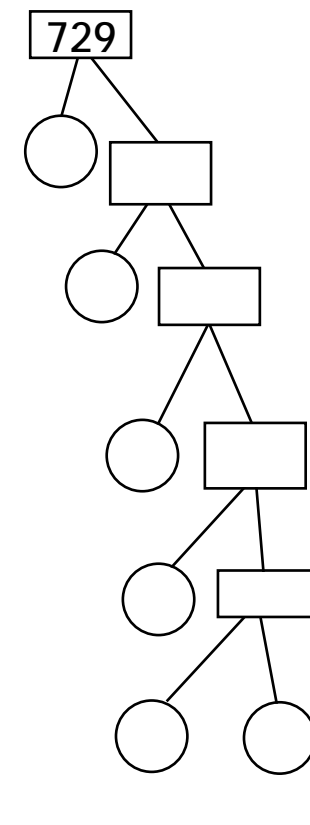
Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">168</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">176</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">180</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">200</div>
<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">243</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">300</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">450</div> 	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px; margin-bottom: 5px;">500</div>

Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">700</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">750</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">1100</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">1250</div>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">1750</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">2450</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">3125</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">16807</div>

Complete Each Factor Tree By Dividing By The Lowest Prime Factor

<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">64</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">96</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">144</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">160</div> 
<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">240</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">224</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">729</div> 	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">1000</div> 