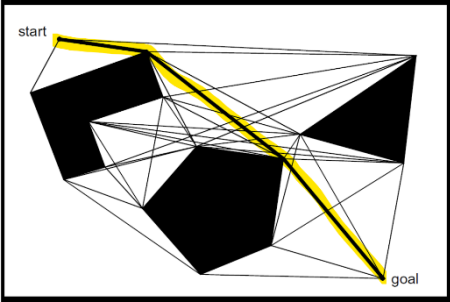
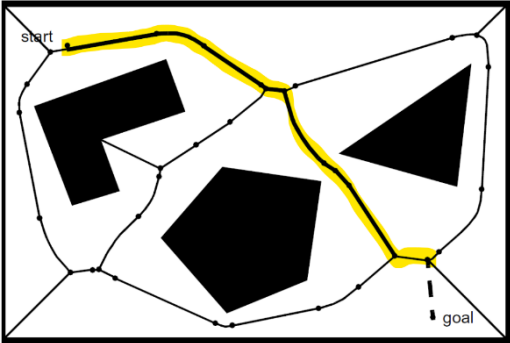
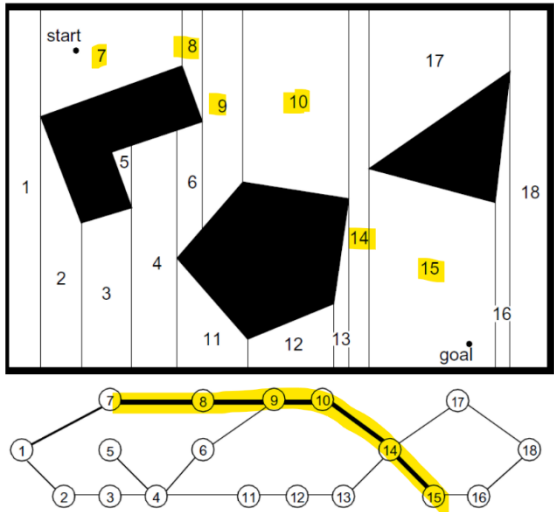
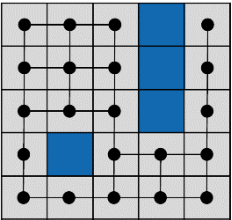
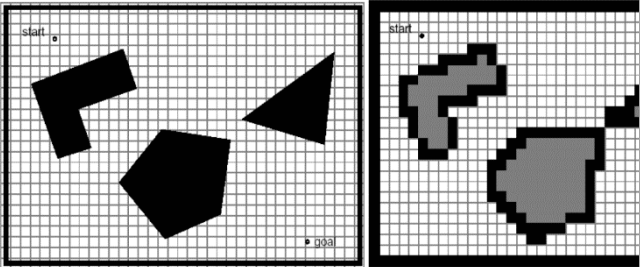
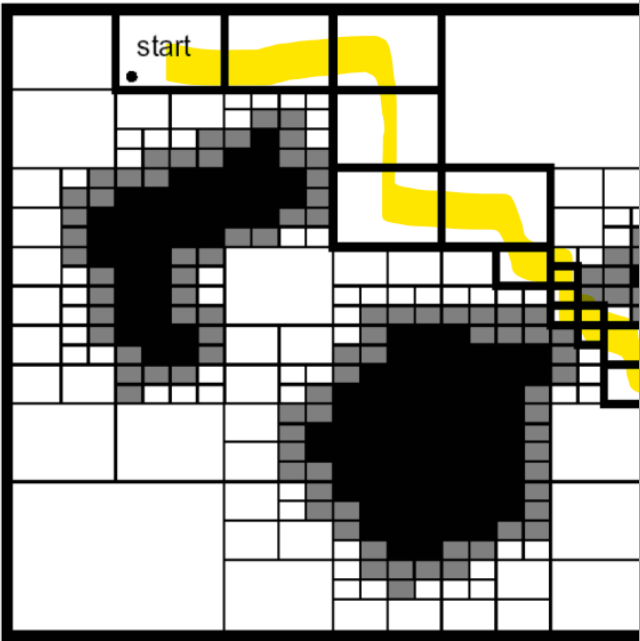


	Explanation	Pros	Cons
Visibility Graph	<p>Connect vertices which are visible to each other can then do a path search</p> 	gives the shortest path	not safe (can hit edges)
Voronoi Diagram	<ul style="list-style-type: none"> <li>- construct vertices at points with equal distance to the nearest two edges</li> <li>- connect vertices</li> <li>- then do a path search</li> </ul> 	safe (doesn't hit edges)	not always the shortest path
Exact cell decomposition	<ul style="list-style-type: none"> <li>- split map into "zones" based on polygon vertices of obstacles</li> <li>- connect adjacent zones</li> </ul> 	Efficient for large, sparse environments	complex implementation

<p>Fixed cell decomposition (occupancy grid)</p>	<ul style="list-style-type: none"> <li>- split map into cells of a grid</li> <li>- connect adjacent cells which don't contain obstacles</li> </ul>  	<p>Easy to implement</p>	<p>High memory requirements may lose narrow passages if resolution isn't high enough</p>
<p>Adaptive cell decomposition</p>	<ul style="list-style-type: none"> <li>- similar to fixed cell decomposition (occupancy grid)</li> <li>- fewer cells/nodes for large areas</li> <li>- more cells/nodes close to obstacles</li> </ul> 	<p>solves memory issue</p>	<p>complex implementation</p>