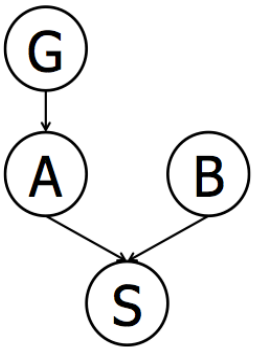
1 [20 points] Bayes Net Inference

$\mathbb{P}(G)$	
$+g$	0.1
$-g$	0.9

$\mathbb{P}(A\|G)$		
$+g$	$+a$	1.0
$+g$	$-a$	0.0
$-g$	$+a$	0.1
$-g$	$-a$	0.9



$\mathbb{P}(B)$	
$+b$	0.4
$-b$	0.6

$\mathbb{P}(S\|A,B)$			
$+a$	$+b$	$+s$	1.0
$+a$	$+b$	$-s$	0.0
$+a$	$-b$	$+s$	0.9
$+a$	$-b$	$-s$	0.1
$-a$	$+b$	$+s$	0.8
$-a$	$+b$	$-s$	0.2
$-a$	$-b$	$+s$	0.1
$-a$	$-b$	$-s$	0.9

Compute the values of the following probabilities:

1. **[3 points]** $P(+g, +a, +b, +s) =$

2. **[3 points]** $P(+a) =$

3. **[3 points]** $P(+a \mid +b) =$

4. **[5 points]** $P(+a \mid +s, +b) =$

5. **[3 points]** $P(+g \mid +a) =$

6. **[3 points]** $P(+g \mid +b) =$