

# Review:

Thursday, April 5, 2018 12:24 PM

The probability that the starting goalie for the Canucks is injured is 9%. The probability that the backup goalie is injured is 12%. The probability that both are injured is 2%.

$P(A)$  (pointing to 9%)  
 $P(B)$  (pointing to 12%)  
 $P(A \cap B)$  (pointing to 2%)

- a) What is the probability that neither of them is injured?
- b) What is the probability that at least one of them is injured?

method #1

		goalie A		
		injured	not injured	
goalie B	injured	0.02	0.10	0.12
	not injured	0.07	0.81	0.88
		0.09	0.91	

a)  $P(\text{neither}) = 0.81$

b)  $P(\text{at least one}) = 0.19$

method #2:

b) 
$$\begin{aligned} P(A \text{ or } B) &= P(A) + P(B) - P(A \text{ and } B) \\ &= 0.09 + 0.12 - 0.02 \\ &= 0.19 \end{aligned}$$

a) 
$$\begin{aligned} P(\text{neither}) &= 1 - P(A \text{ or } B) \\ &= 0.81 \end{aligned}$$