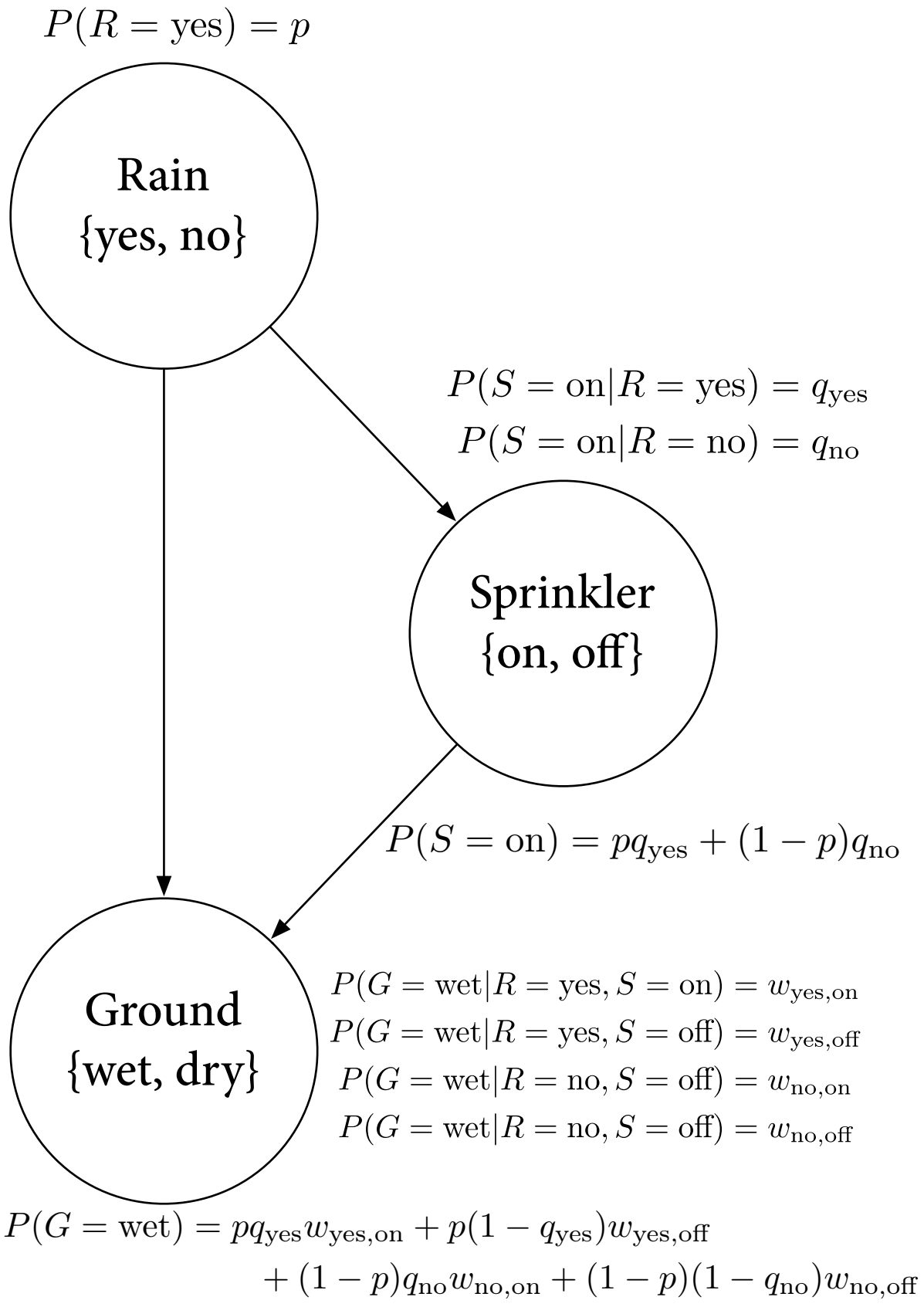
$P(R = \text{yes}) = p$
Rain
{yes, no}
$P(S = \text{on}|R = \text{yes}) = q_{\text{yes}}$
$P(S = \text{on}|R = \text{no}) = q_{\text{no}}$
Sprinkler
{on, off}
$P(S = \text{on}) = pq_{\text{yes}} + (1 - p)q_{\text{no}}$
Ground
{wet, dry}
$P(G = \text{wet}|R = \text{yes}, S = \text{on}) = w_{\text{yes,on}}$
$P(G = \text{wet}|R = \text{yes}, S = \text{off}) = w_{\text{yes,off}}$
$P(G = \text{wet}|R = \text{no}, S = \text{off}) = w_{\text{no,on}}$
$P(G = \text{wet}|R = \text{no}, S = \text{off}) = w_{\text{no,off}}$
$P(G = \text{wet}) = pq_{\text{yes}}w_{\text{yes,on}} + p(1 - q_{\text{yes}})w_{\text{yes,off}}$
$+ (1 - p)q_{\text{no}}w_{\text{no,on}} + (1 - p)(1 - q_{\text{no}})w_{\text{no,off}}$