$\ldots 9\ 7\ 5\ 3\ 1\ 2\ 4\ 6\ 8 \ldots$

$\{\ldots, -4, -3, -2, -1, 0, 1, 2, 3, 4, \ldots\}$

---

ex roll a 6-sided die

E_1 = "roll an even" $= \{2, 4, 6\}$

E_2 = "roll a 5" $= \{5\}$ ← no outcomes in common

$E_1 \cap E_2 = \emptyset = \{\}$

$Pr(\text{roll an even or a 5}) = Pr[\text{even}] + Pr[5]$

$\frac{1}{2} + \frac{1}{6} = \frac{4}{6}$