

CS 2259 3/03/20 (prob test material)

min # (big, small, and red fruits) = 0

$$\begin{aligned} b &= \begin{pmatrix} \text{big} \\ \text{small} \\ \text{red} \\ \text{fruit} \end{pmatrix} = 7 \\ s &= 6 \\ r &= 4 \\ f &= \end{aligned}$$

cannot be > 4

17? yes

12? yes 11? yes

7? no 8? no

f = sum of the 2 smallest items from b, s, r
 $= \min(b+s, b+r, s+r)$

↳ ensures $\min \#(-, -, -) = 0$

but not most restrictive

$2f \geq b+s+r$ to make $\min \#(b, s, r) = 0$
 $2 \times 8 = 16 < 17$

$(C_m) = (C_{m-1}, m)$ for fixed m

$(C_m) = (C_{m-1}) / m \neq (C_{m-1})$

m at least 2

(C_{m-1}) must not be divisible by 2
 $n = 3$

$$H \setminus W = H - W$$

$$H \setminus W \cup W \setminus H = (H \cup W) \setminus (H \cap W)$$

$$H \setminus W \cup W \setminus H = \emptyset \text{ iff } H = W$$

Symmetric difference

$$H \Delta W = W \Delta H = (H \setminus W) \cup (W \setminus H)$$

