count Subset with Given Diff

$$arr = [5, 2, 6, 4]$$
$$diff = 3$$

Choice Diagram

$$\overline{5 \quad 2 \quad 6 \quad 4}$$

$$S_1 - S_2 = d$$
$$S_1 + S_2 = S$$
$$2 S_1 = d + S$$
$$S_1 = \boxed{\frac{d + S}{2}}$$

Same as (Count Subset with Sum)