

1. Given that $F_{19} = 4,181$ and $F_{20} = 6,765$, find

(a) F_{21}

$$F_{21} = F_{20} + F_{19} = 6765 + 4181 = 10,946.$$

(b) F_{18}

$$F_{20} = F_{19} + F_{18} \Rightarrow F_{18} = F_{20} - F_{19} = 6,765 - 4,181 = 2,584.$$

2. Given that $F_{31} = 1,346,269$ and $F_{33} = 3,524,578$, find

(a) F_{32}

$$F_{33} = F_{32} + F_{31} \Rightarrow F_{32} = F_{33} - F_{31} = 3,524,578 - 1,346,269 = 2,178,309.$$

(b) F_{34}

$$F_{34} = F_{33} + F_{32} = 3,524,578 + 2,178,309 = 5,702,887.$$