$$2 + \frac{4 + \frac{8 + \frac{16}{17}}{9 + \frac{18}{18}}}{5 + \frac{10 + \frac{20}{11}}{11 + \frac{22}{23}}}$$

$$1 + \frac{6 + \frac{12 + \frac{24}{25}}{13 + \frac{26}{13}}}{7 + \frac{14 + \frac{28}{20}}{15 + \frac{30}{31}}}$$

$$(1)$$