The Harmonic Triangle Challenge

Every fraction is the sum of the two fractions below it.

Fill in the circles with the fraction so the pattern continues.

When you're done, make a conjecture about what's happening, and a prediction about something that will happen in the next row. Then fill the next row in and see if you're right!

$$\frac{1}{1}$$

$$\frac{1}{2} \qquad \frac{1}{2}$$

$$\frac{1}{3} \qquad \frac{1}{6} \qquad \frac{1}{3}$$

$$\frac{1}{4} \qquad \bigcirc \qquad \bigcirc \qquad \frac{1}{4}$$

$$\frac{1}{5} \qquad \bigcirc \qquad \bigcirc \qquad \bigcirc \qquad \frac{1}{5}$$

$$\frac{1}{6} \qquad \bigcirc \qquad \bigcirc \qquad \bigcirc \qquad \bigcirc \qquad \frac{1}{6}$$