

Fraction fireworks

1. Work out the answers to the following:
 $1 \times 1\frac{1}{2}$, $2 \times 2\frac{2}{3}$, $3 \times 3\frac{3}{4}$ and $4 \times 4\frac{4}{5}$.
 Make a note of your answers.
2. What do you think the next answer will be
 in this sequence of calculations, i.e. $5 \times 5\frac{5}{6}$?
 Test out your prediction!
3. Now work out $1\frac{1}{2} \times 3$, $2\frac{2}{3} \times 4$, $3\frac{3}{4} \times 5$
 and keep a record of your answers.
4. What do you think the next answer in the
 sequence will be, i.e. the answer to $4\frac{4}{5} \times 6$?
 Test out your prediction.
5. Compare your answers to the answer in
 the first sequence of calculations.
 What's the same and what's different?

$$1 \times 1\frac{1}{2} = 1\frac{1}{2}$$

$$2 \times 2\frac{2}{3} = \frac{2}{1} \times \frac{8}{3} = \frac{16}{3} = 5\frac{1}{3}$$

$$3 \times 3\frac{3}{4} = \frac{3}{1} \times \frac{15}{4} =$$

Challenge

Make up your own sequences of fraction multiplications, or try $1 \times 2\frac{3}{4}$, $2 \times 3\frac{4}{5}$,
 $3 \times 4\frac{5}{6}$... See what patterns you can find.