

Name: _____

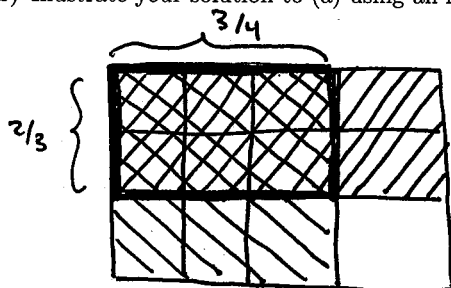
Key

Show all work clearly and in order.

1. Simplify $\frac{4}{5} - \frac{1}{4} = \frac{4 \cdot 4}{5 \cdot 4} - \frac{1 \cdot 5}{4 \cdot 5} = \frac{16}{20} - \frac{5}{20} = \boxed{\frac{11}{20}}$

2. (a) Simplify $\frac{2}{3} \times \frac{3}{4} = \frac{2 \cdot 3}{3 \cdot 4} = \frac{6}{12} = \boxed{\frac{1}{2}}$

(b) Illustrate your solution to (a) using a rectangular array model.



only $\frac{6}{12}$ is shaded by both.

so $\frac{6}{12} = \boxed{\frac{1}{2}}$ is the answer.

3. Simplify $\frac{4}{5} \div \frac{1}{4} = \frac{4}{5} \times \frac{4}{1} = \boxed{\frac{16}{5}}$ or $\boxed{3\frac{1}{5}}$

4. Simplify $\frac{2^2}{3 \cdot 5^2} \div \frac{7^2 \cdot 2^3}{5 \cdot 2} = \frac{2^2}{3 \cdot 5^2} \cdot \frac{5 \cdot 2}{7^2 \cdot 2^3} = \frac{\cancel{2^2} \cdot \cancel{2} \cdot 5}{\cancel{2^3} \cdot 3 \cdot 5^2 \cdot 7^2} = \boxed{\frac{1}{3 \cdot 5 \cdot 7^2}} = \frac{1}{735}$