Dividing Mixed Numbers
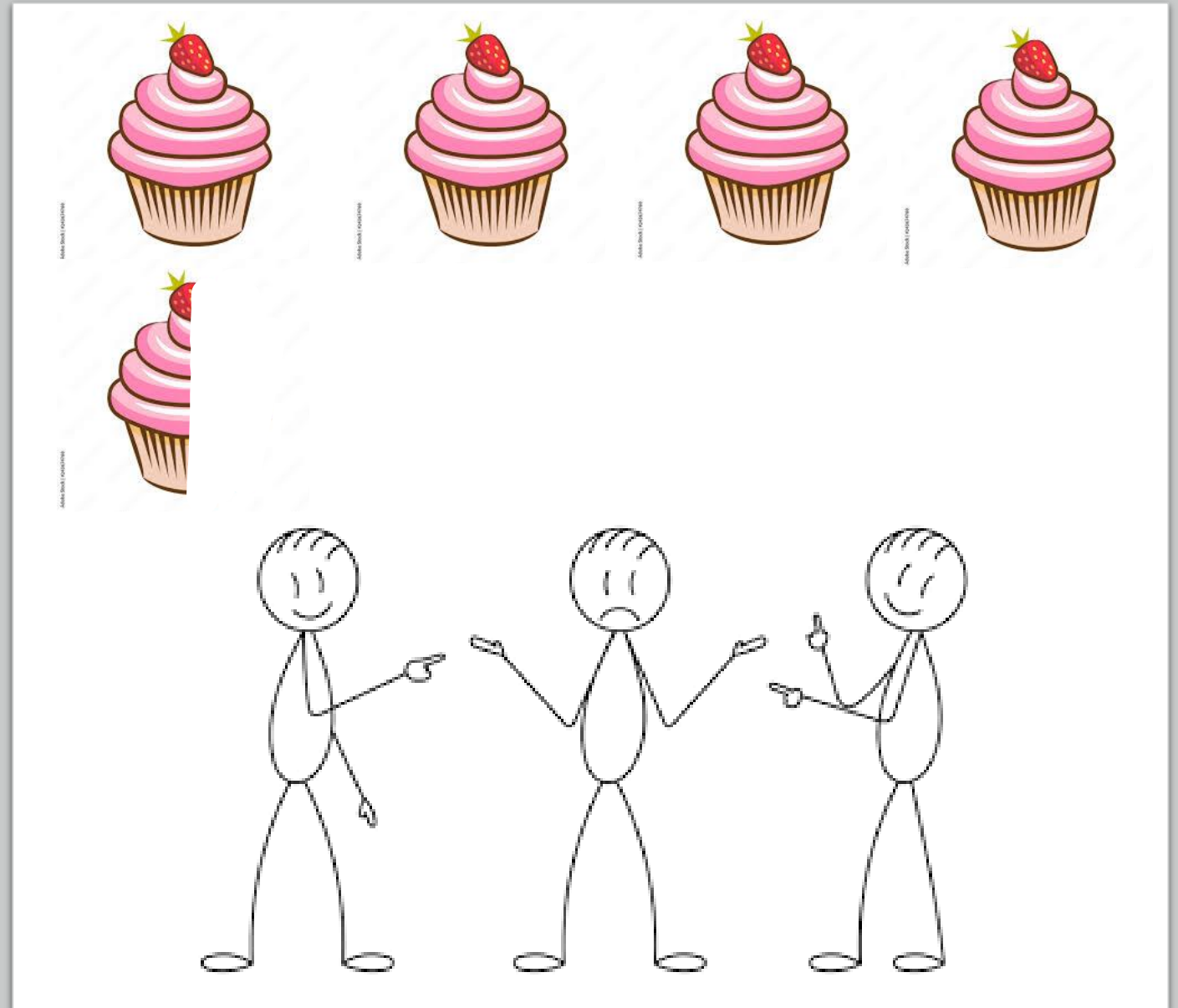
Think about it

If you had 4 ½ cupcakes and you wanted to give each of your 3 friends the same amount of cupcake, how much of the cupcake/s would each friend get?

- Step 1- Turn the mixed numbers into an improper fraction

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 2 – Keep the first fraction the same

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 3 – Switch the division sign to multiplication

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 4 – Flip the second fraction to the reciprocal

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 5 - Simplify if possible

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 6 – Multiply Across

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 7 – Turn into Simplest form

$$3\frac{5}{6} \div \frac{2}{3}$$

- Step 8 – Ask yourself "Does my answer make sense?"

$$3\frac{5}{6} \div \frac{2}{3}$$

Example 1

$$1\frac{3}{7} \div \frac{2}{3}$$

Example 2

$$8\frac{1}{4} \div 1\frac{1}{2}$$

You try these

$$2\frac{1}{6} \div \frac{3}{4}$$

$$6\frac{4}{5} \div 2\frac{1}{8}$$

Word Problem

- One serving of tortilla soup is $1\frac{2}{3}$ cups. A restaurant cook makes 50 cups of soup. Is there enough to serve 35 people?

Independent Activity

Thumbs down grab sheet 1.

Thumbs to the side grab sheet 2.

Thumbs up grab sheet 3.

START

$2\frac{3}{8} \div 1\frac{1}{2}$ →$2\frac{1}{2}$→ $1\frac{3}{5} \div 1\frac{1}{3}$ →$4\frac{3}{5}$→ $4\frac{2}{3} \div 1\frac{1}{5}$

$1\frac{7}{12}$ $1\frac{1}{2}$ $4\frac{3}{4}$ $4\frac{4}{5}$ $3\frac{8}{9}$ $3\frac{11}{12}$

$4 \div 1\frac{3}{4}$ $2\frac{7}{10} \div 1\frac{1}{5}$

$3\frac{3}{8} \div 2\frac{1}{4}$ $2\frac{3}{7}$ $2\frac{2}{7}$ $2\frac{1}{4}$ $2\frac{1}{2}$ $3\frac{5}{8} \div 2\frac{1}{4}$

$\frac{3}{5}$ $1\frac{1}{3} \div 3\frac{1}{6}$ $\frac{9}{19}$

$1\frac{5}{12}$ $\frac{8}{19}$ $2\frac{11}{18}$

$2\frac{1}{3} \div 2\frac{1}{6}$ $1\frac{2}{5} \div 2\frac{1}{3}$ END $3\frac{1}{4} \div 2\frac{3}{5}$ $2\frac{3}{4} \div 3\frac{1}{2}$

$1\frac{1}{2}$ $1\frac{2}{17}$ $\frac{2}{3}$ $\frac{1}{2}$ $\frac{11}{14}$ $1\frac{11}{18}$

$2\frac{3}{5}$ $1\frac{2}{3}$

$3\frac{1}{5} \div 1\frac{1}{3}$ $1\frac{1}{13}$ $1\frac{5}{9}$ $2\frac{1}{3} \div 1\frac{1}{2}$ $1\frac{1}{4}$ $3\frac{1}{2}$ $4\frac{4}{5} \div 3\frac{3}{4}$

$2\frac{2}{5}$ $\frac{25}{36}$ $1\frac{5}{16}$ $\frac{6}{7}$ $1\frac{7}{25}$

$2\frac{1}{2} \div 3\frac{3}{5}$ $2\frac{5}{6}$ $4\frac{1}{2} \div 3\frac{3}{7}$ $1\frac{8}{25}$

$1\frac{1}{5}$ $2\frac{1}{2}$ 2 $1\frac{5}{6}$

$2\frac{5}{6} \div 2\frac{1}{2}$ →$1\frac{2}{15}$→ $3\frac{1}{2} \div 1\frac{3}{4}$ ←$1\frac{11}{12}$← $5\frac{3}{4} \div 3$