

Fraction Equivalence with Chips

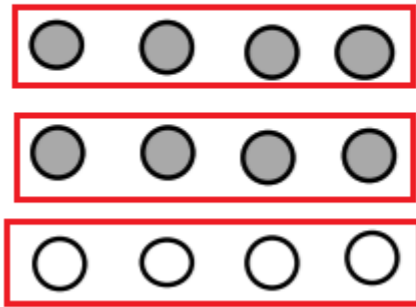
Ari showed the fraction $\frac{2}{3}$ using 12 chips. Erin said that his display really showed $\frac{8}{12}$ while Hamdi said it was $\frac{4}{6}$. Who is correct?

Ari's display:

<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

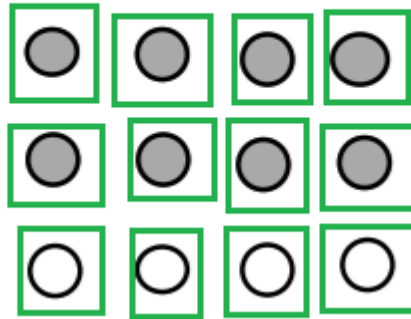
Fractional Equivalence

Group size is 4



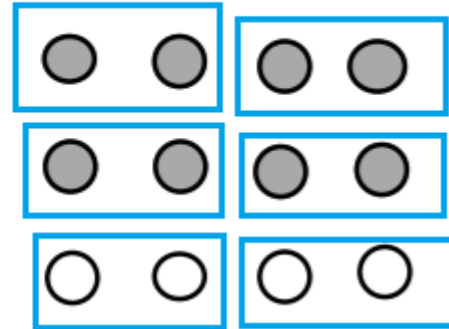
$$\frac{2}{3}$$

Group size is 1



$$\frac{8}{12}$$

Group size is 2

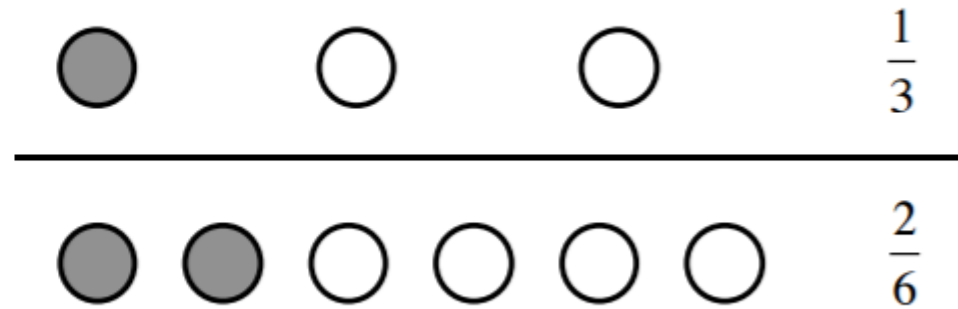


$$\frac{4}{6}$$

$$\frac{2}{3} = \frac{8}{12} = \frac{4}{6}$$

Equivalent Fractions & Group Size

Comparing fractions with chips depends on using the same number of chips in each unit. You cannot compare $\frac{1}{3}$ and $\frac{2}{6}$ if the units are different. For example:



Here it seems that $\frac{2}{6} > \frac{1}{3}$.