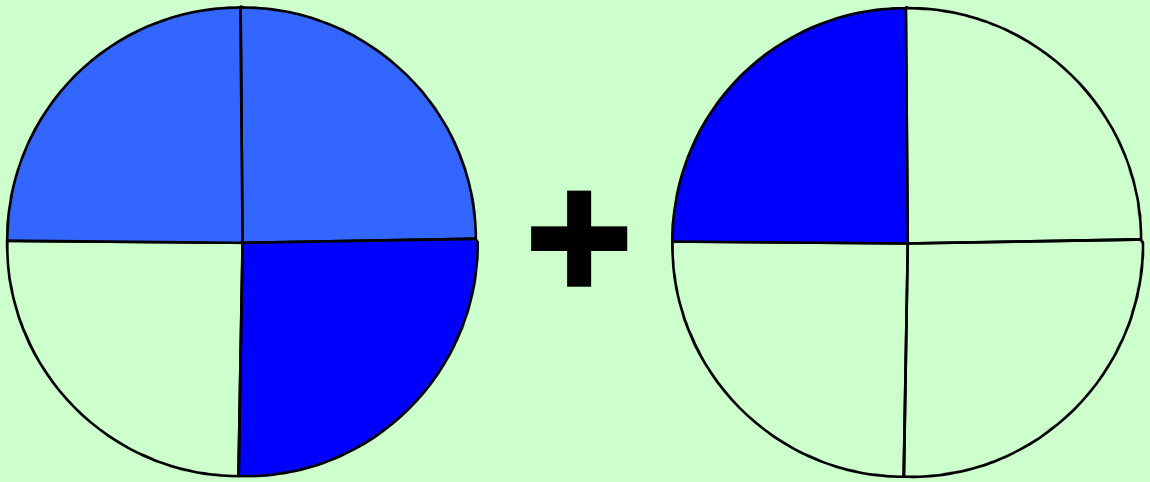
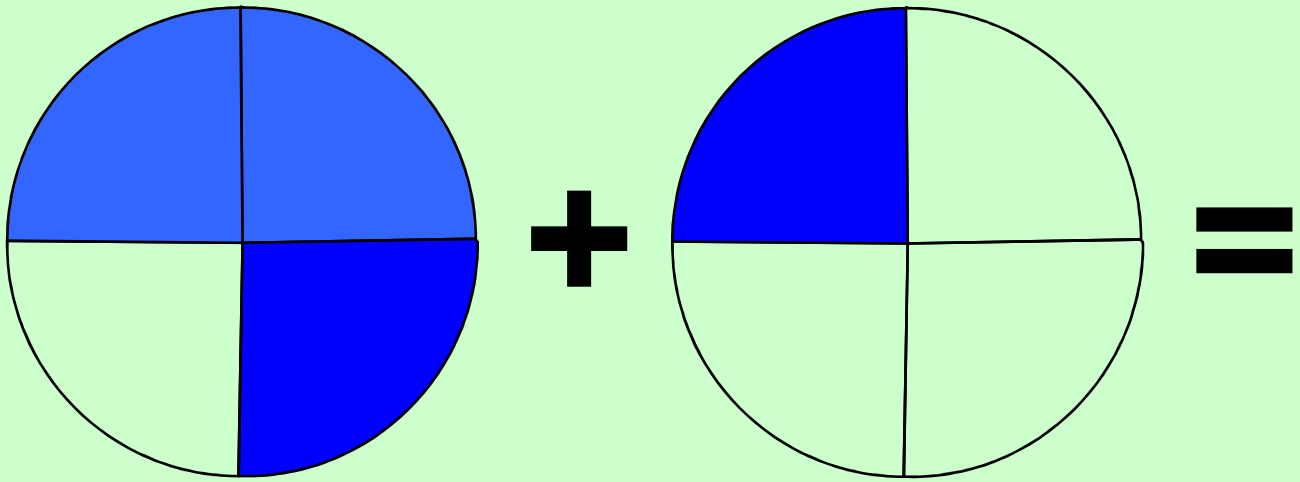
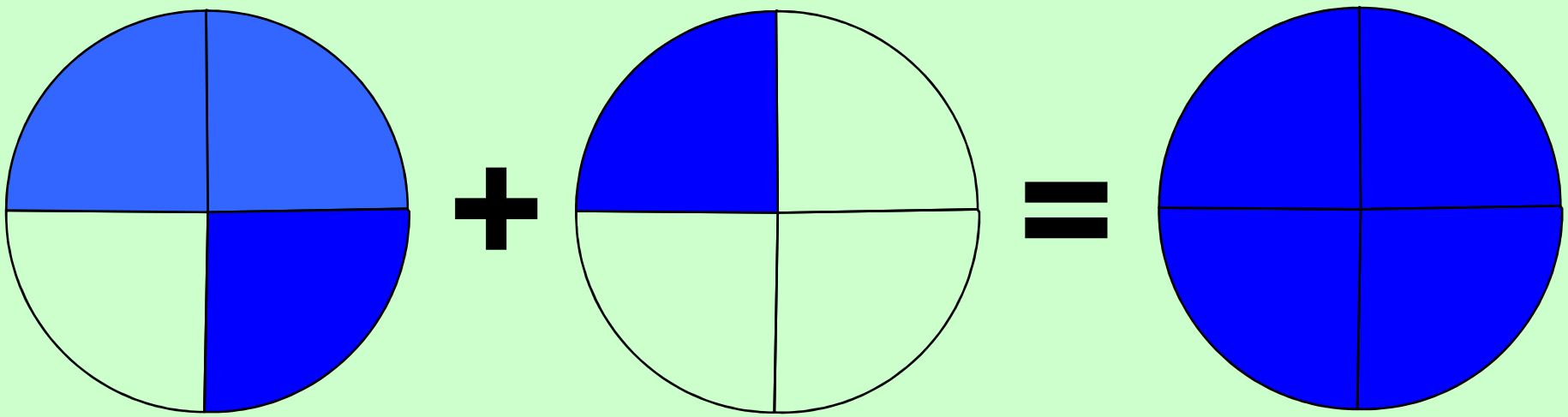
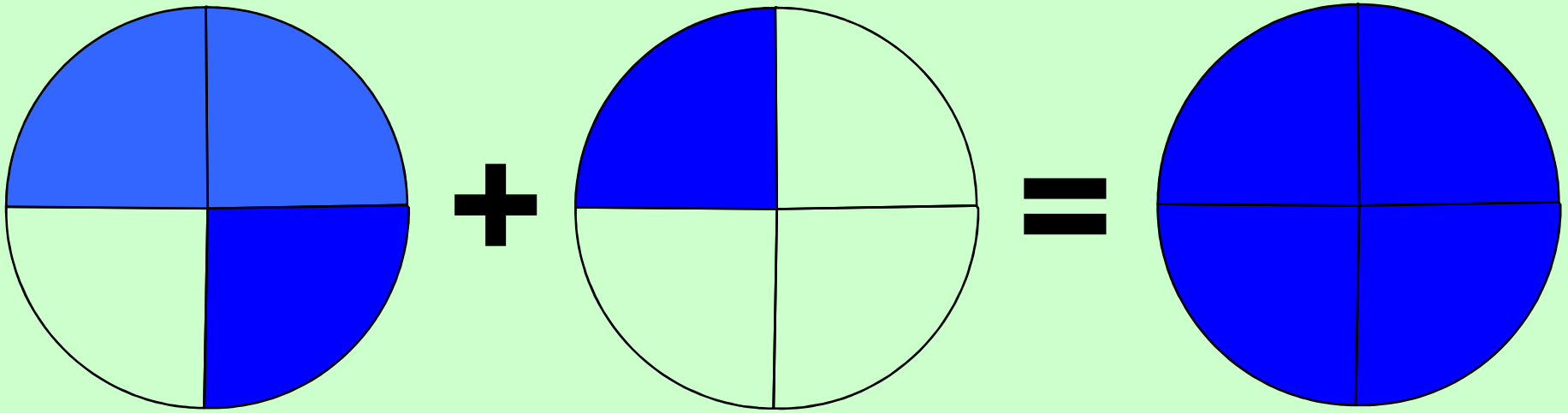
Adding Fractions

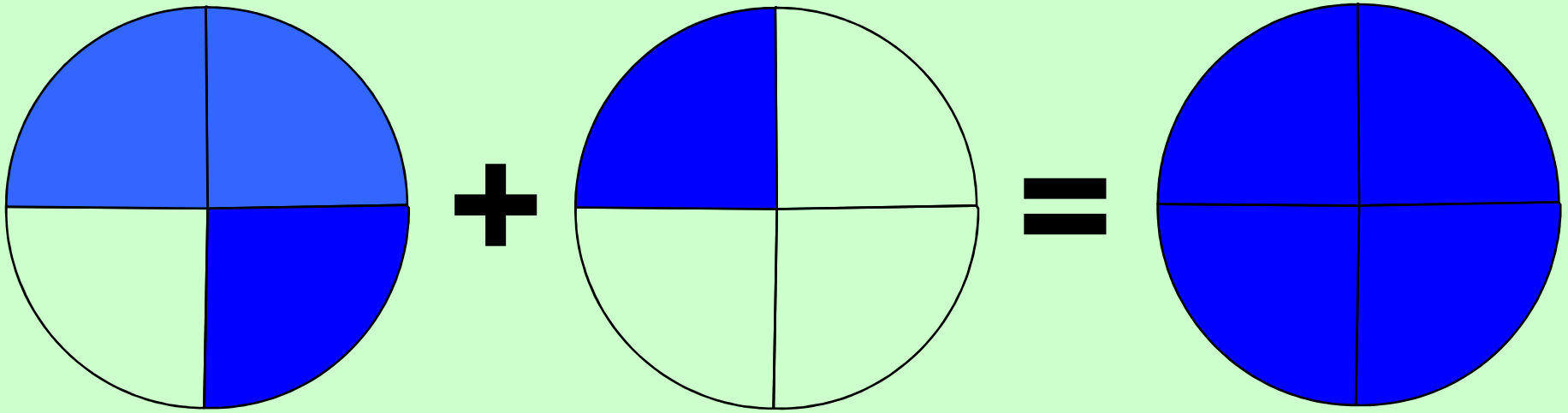




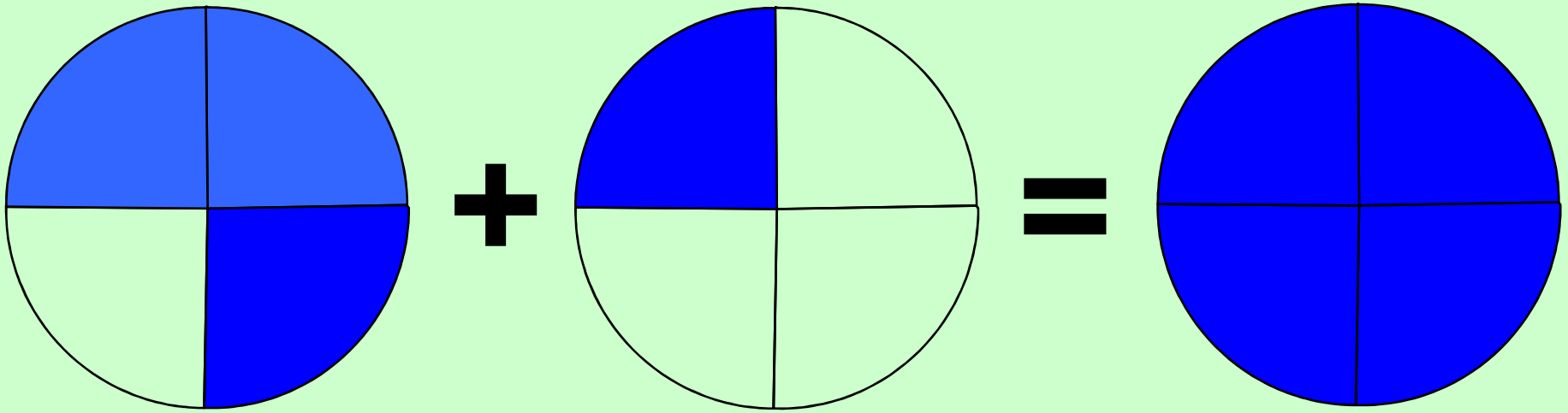




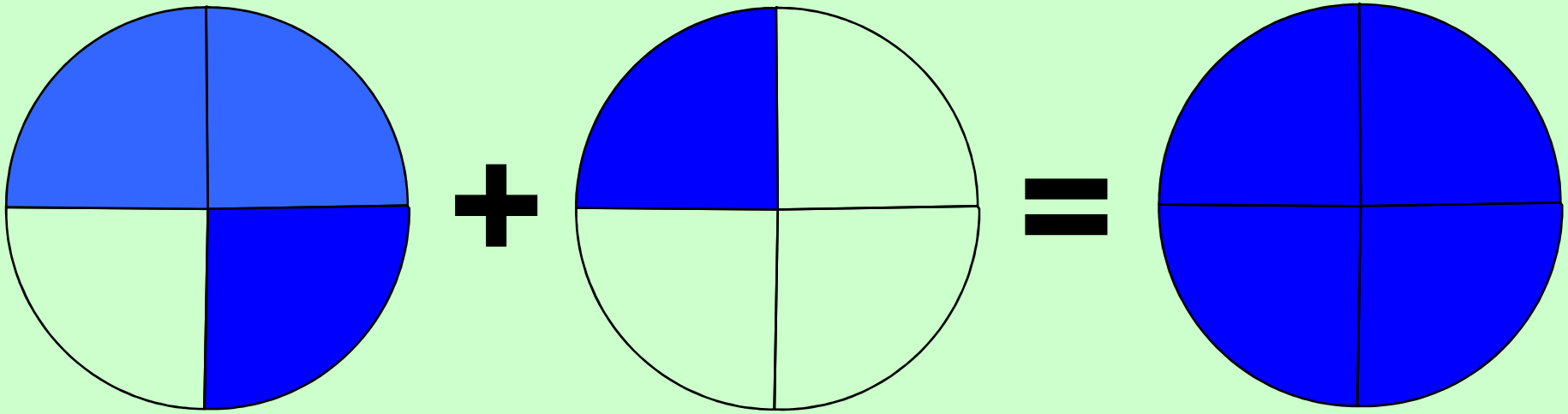
$$\frac{3}{4}$$



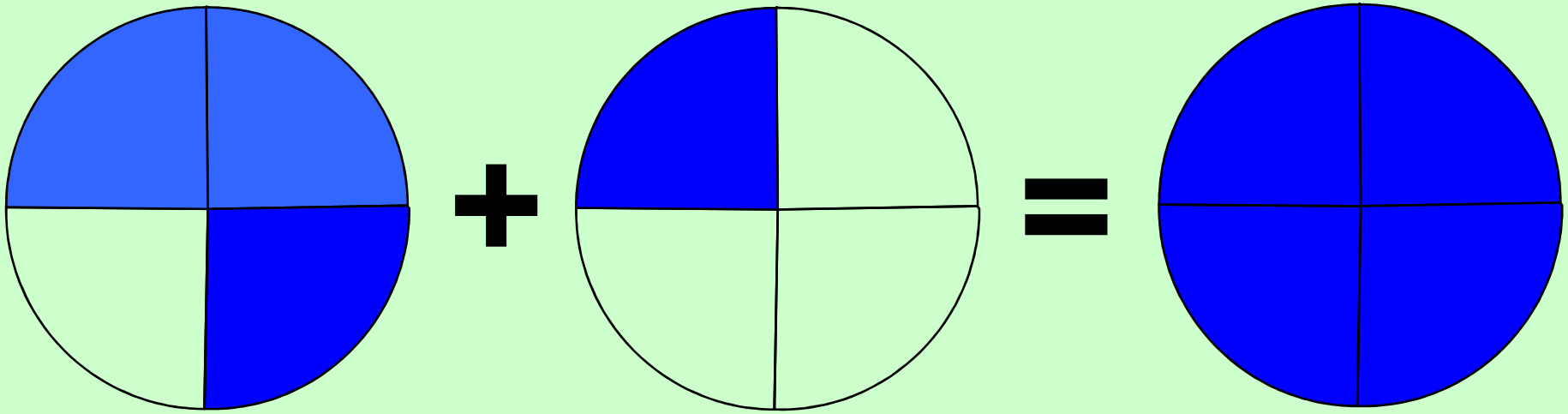
$$\frac{3}{4} +$$



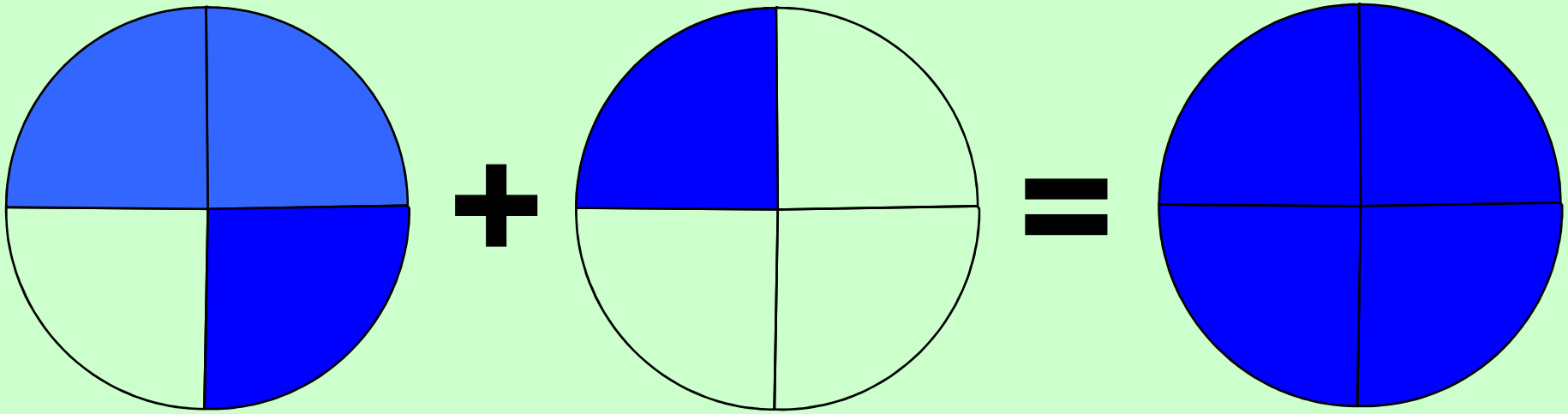
$$\frac{3}{4} + \frac{1}{4}$$



$$\frac{3}{4} + \frac{1}{4} =$$

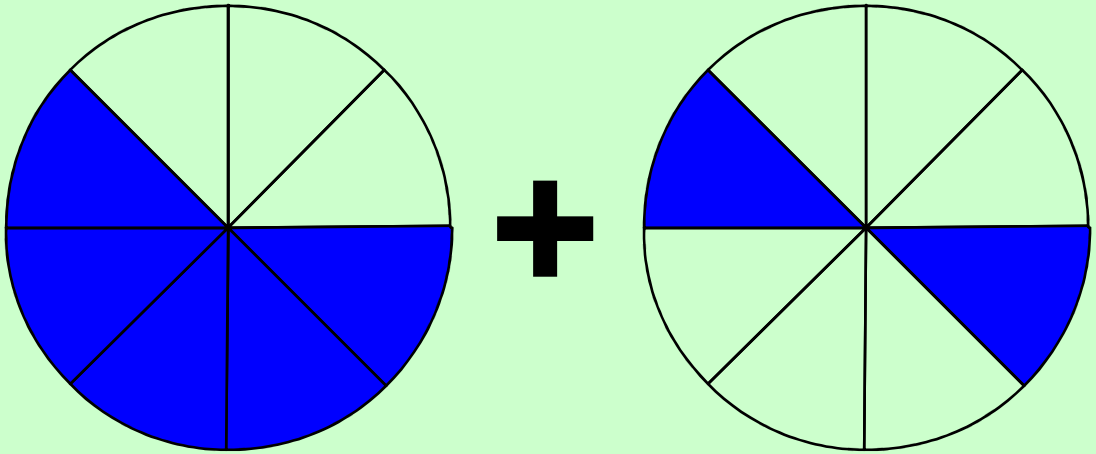


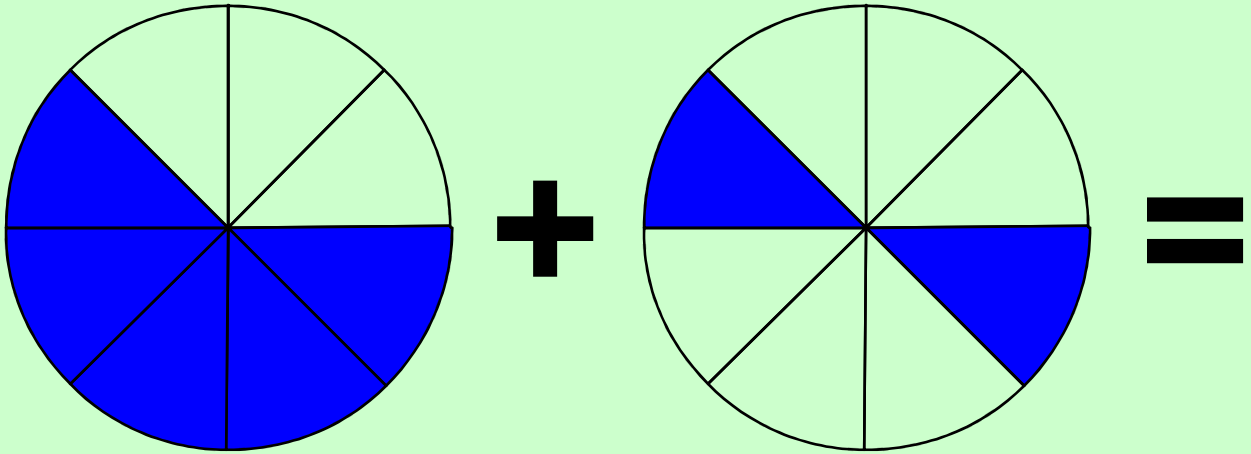
$$\frac{3}{4} + \frac{1}{4} = \frac{4}{4}$$

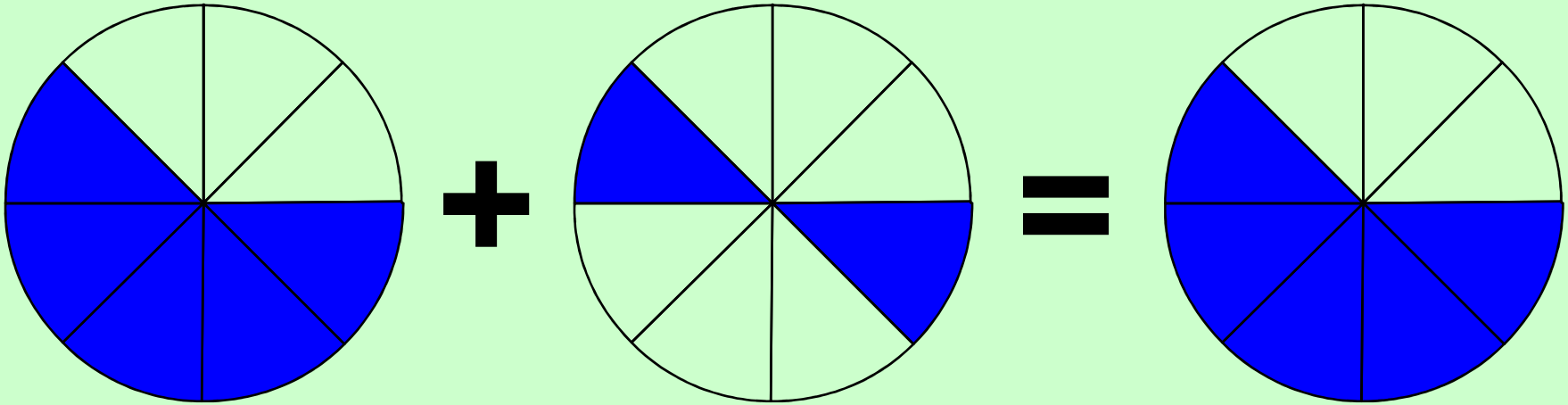


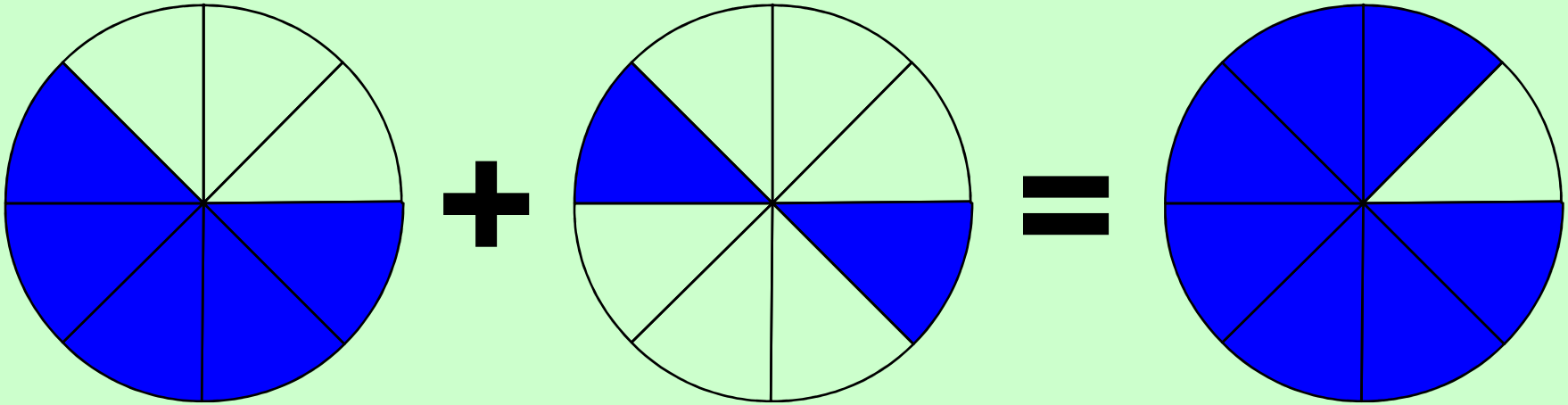
$$\frac{3}{4} + \frac{1}{4} = \frac{4}{4} \approx 1$$

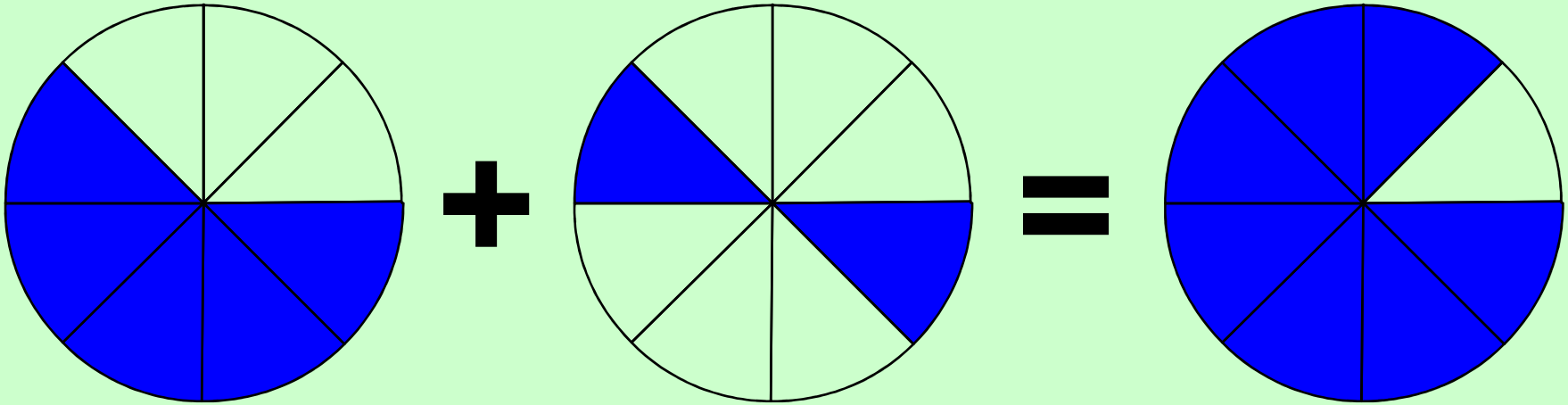
Same denominators: add the numerators!



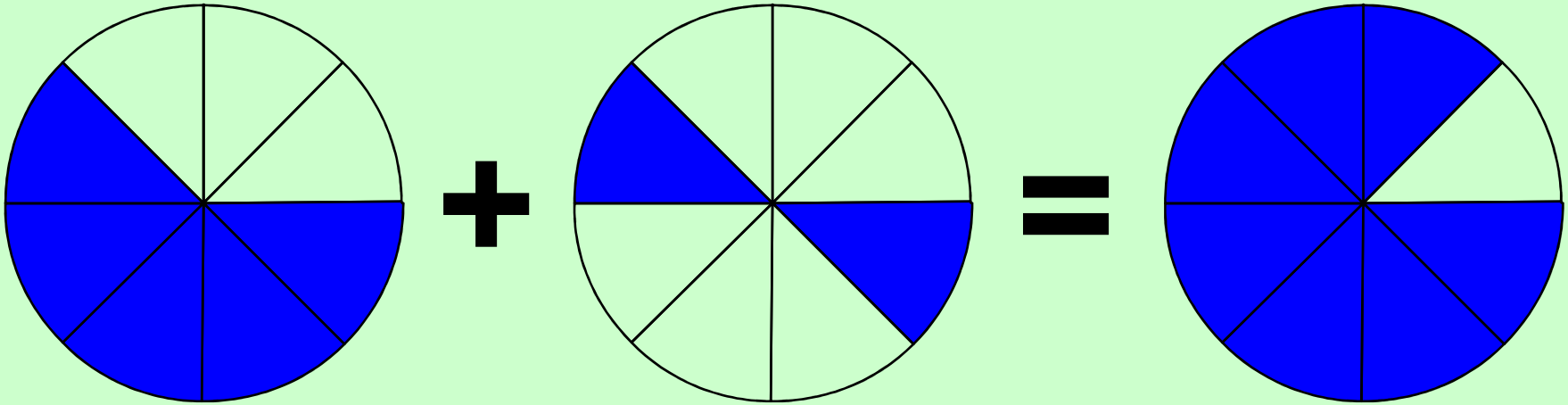




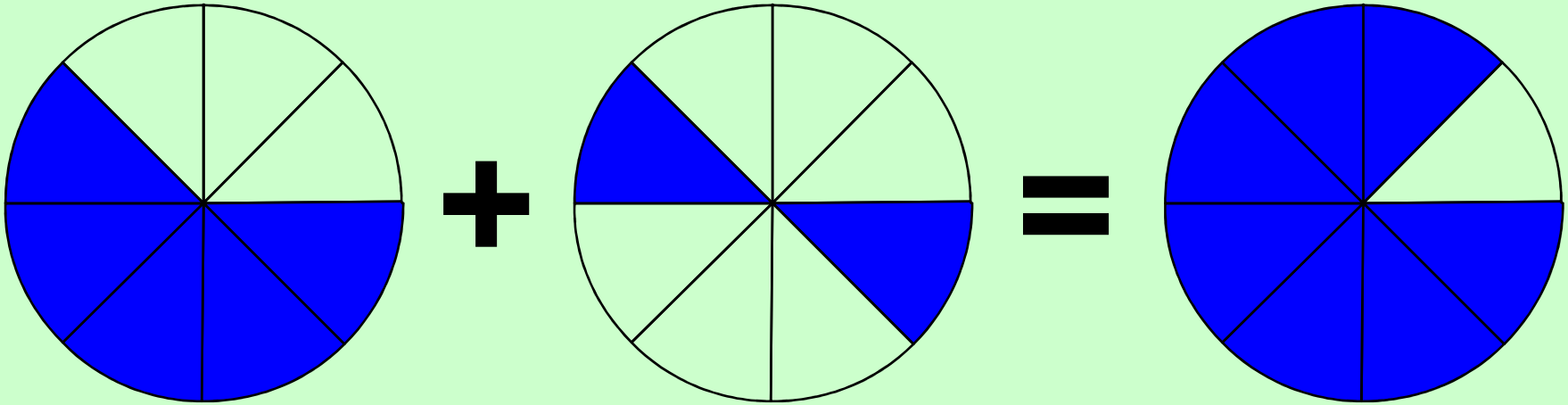




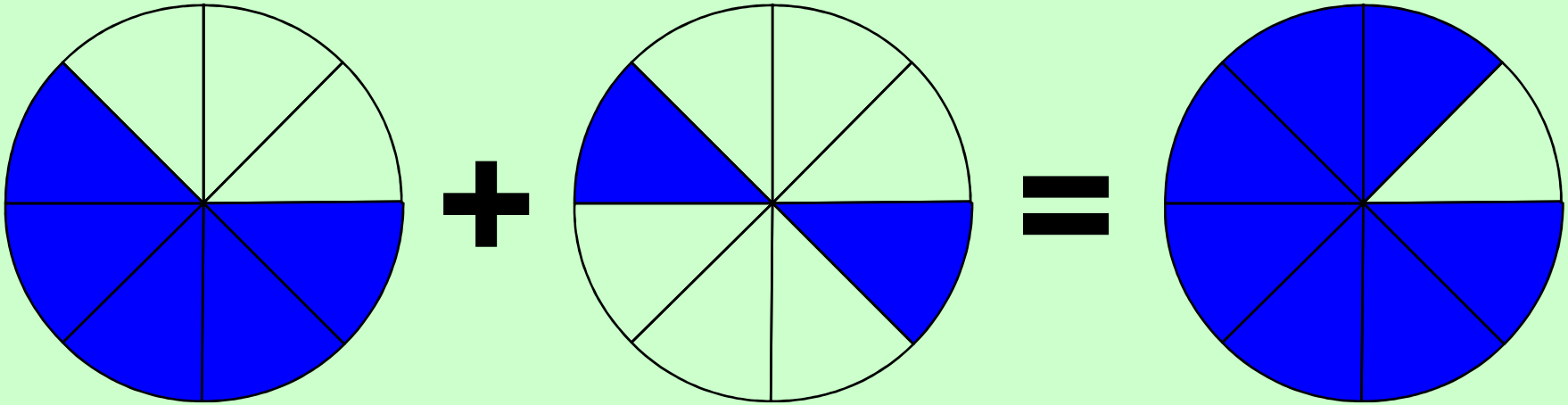
$$\frac{5}{8}$$



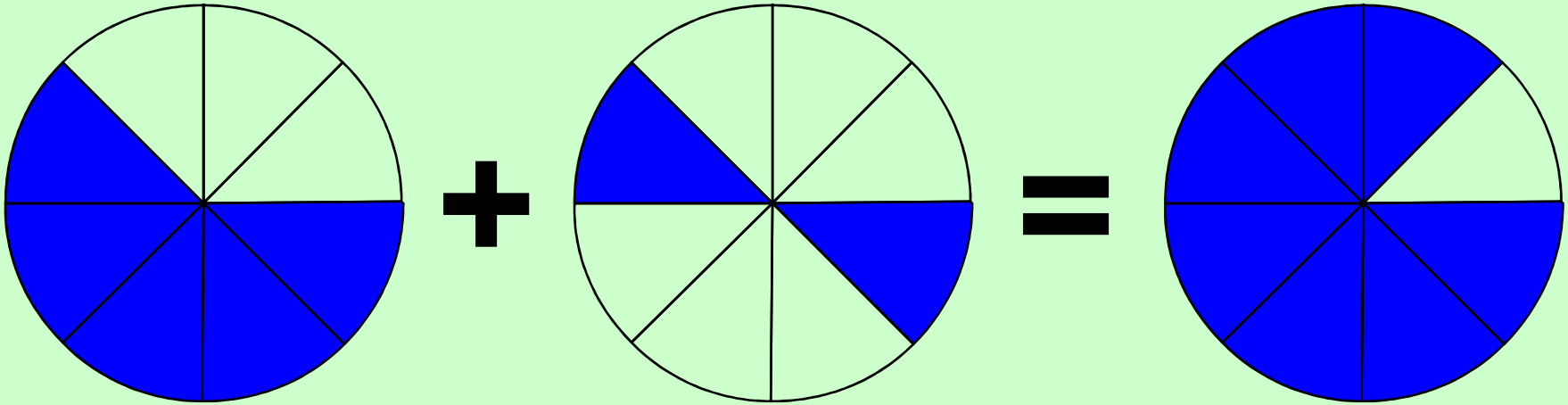
$$\frac{5}{8} +$$



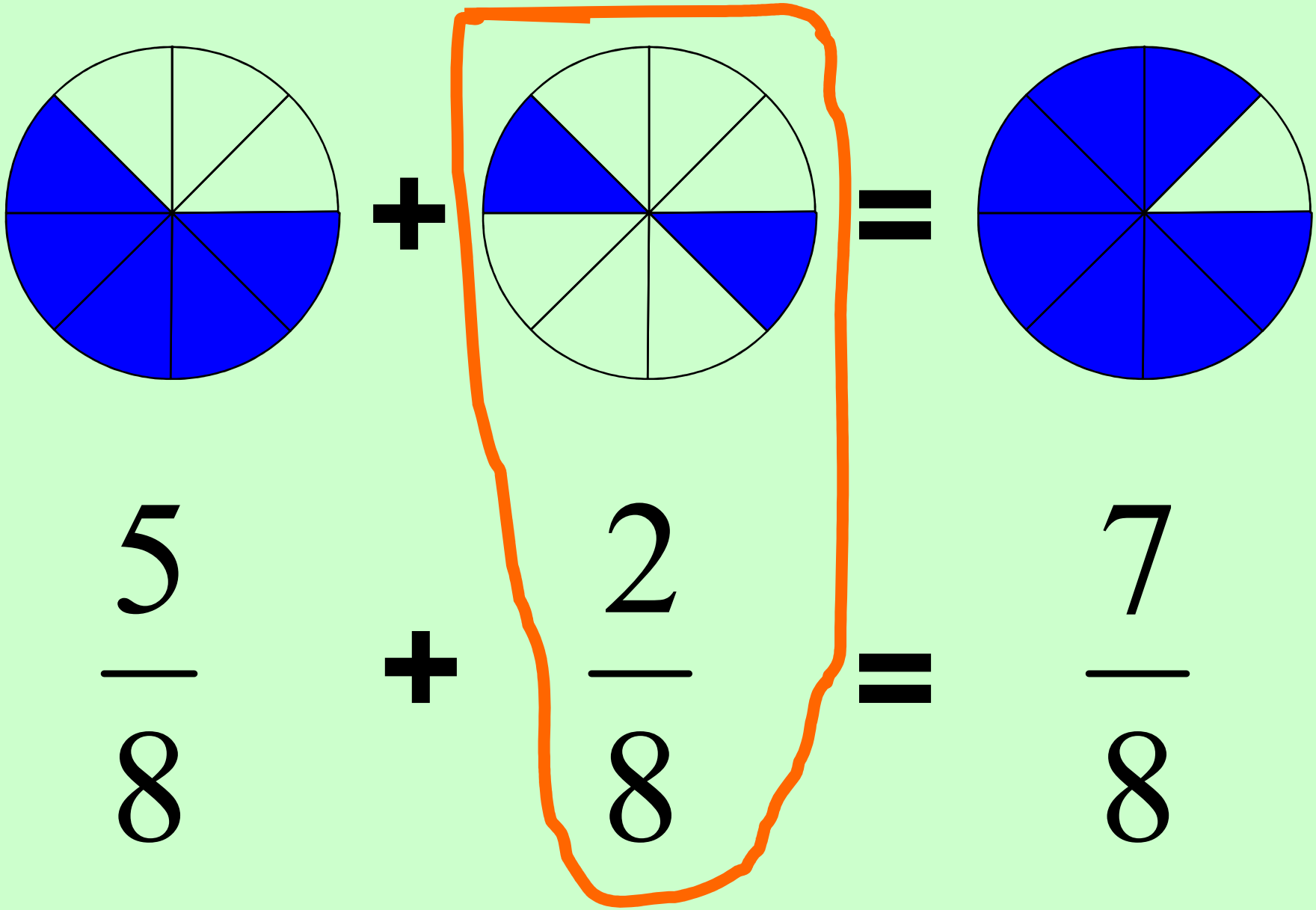
$$\frac{5}{8} + \frac{2}{8}$$



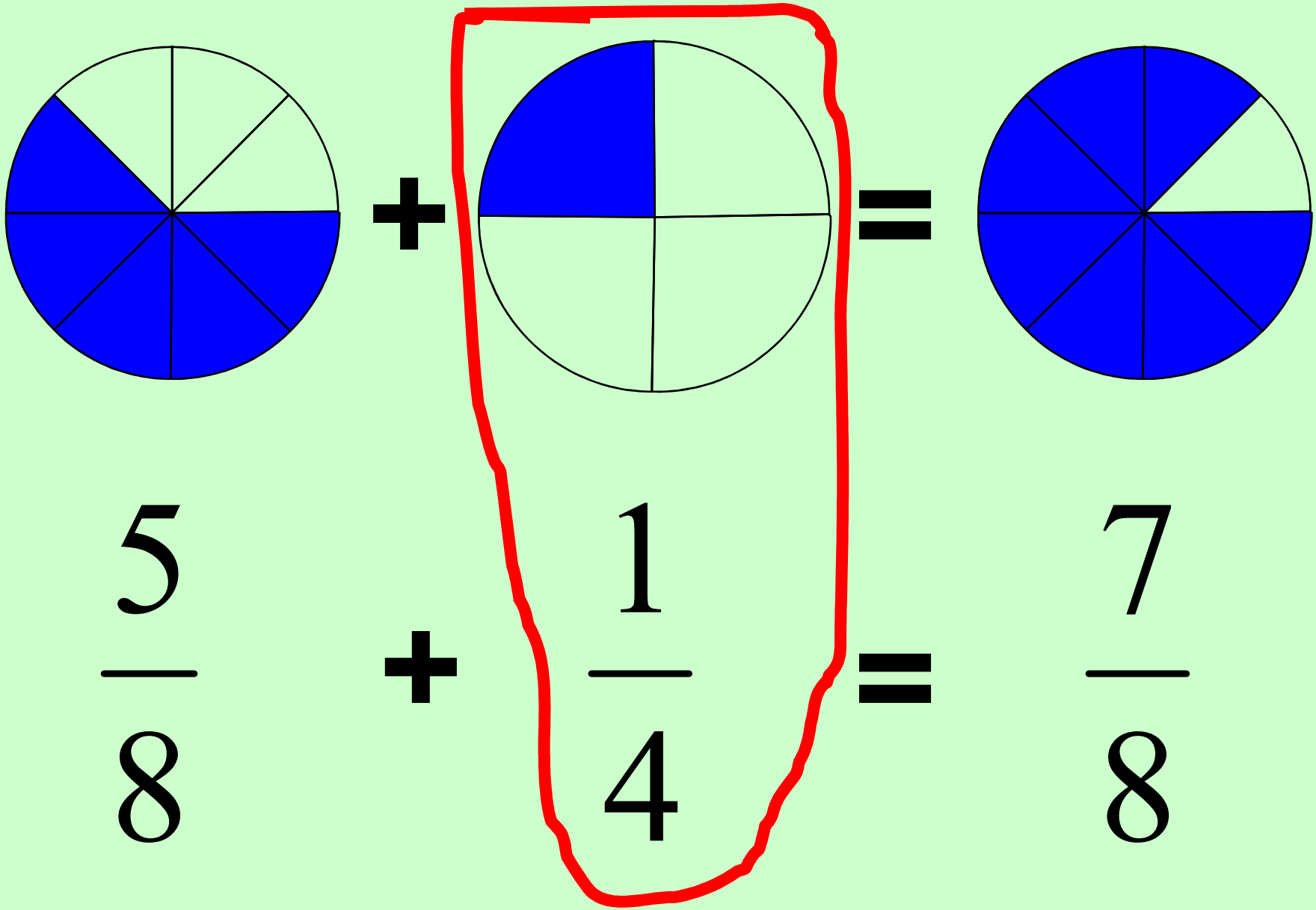
$$\frac{5}{8} + \frac{2}{8} =$$



$$\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

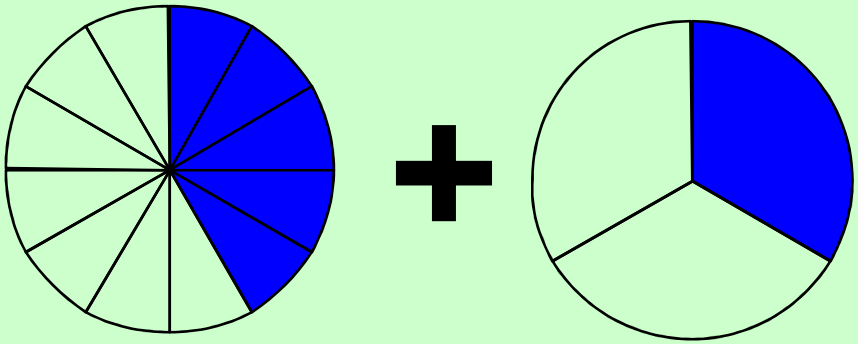


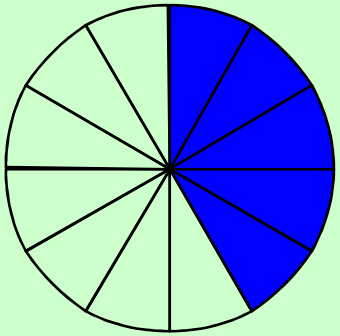
$$\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$



$$\frac{5}{8} + \frac{1}{4} = \frac{7}{8}$$

If the denominators are different, find equivalent fractions, then add numerators





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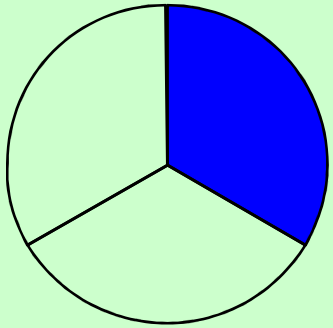
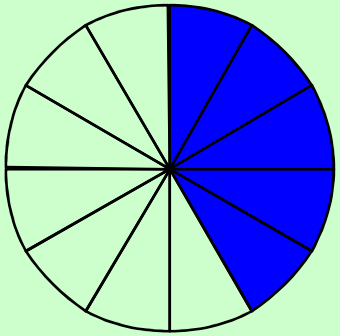


$\frac{5}{12} + \frac{1}{3}$



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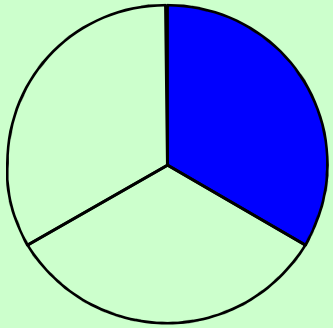
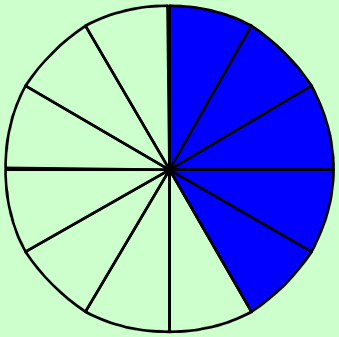
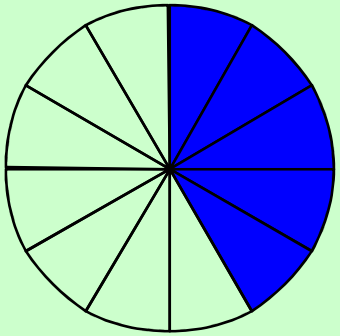


$$\frac{5}{12} + \frac{1}{3}$$





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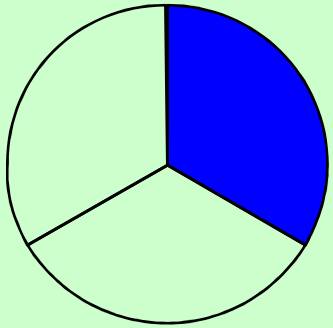
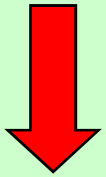
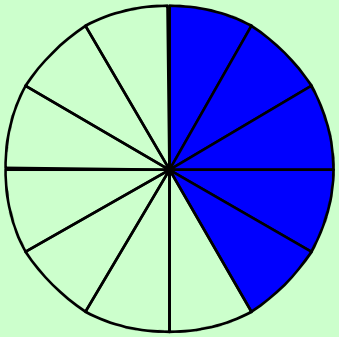


$\frac{5}{12} + \frac{1}{3}$





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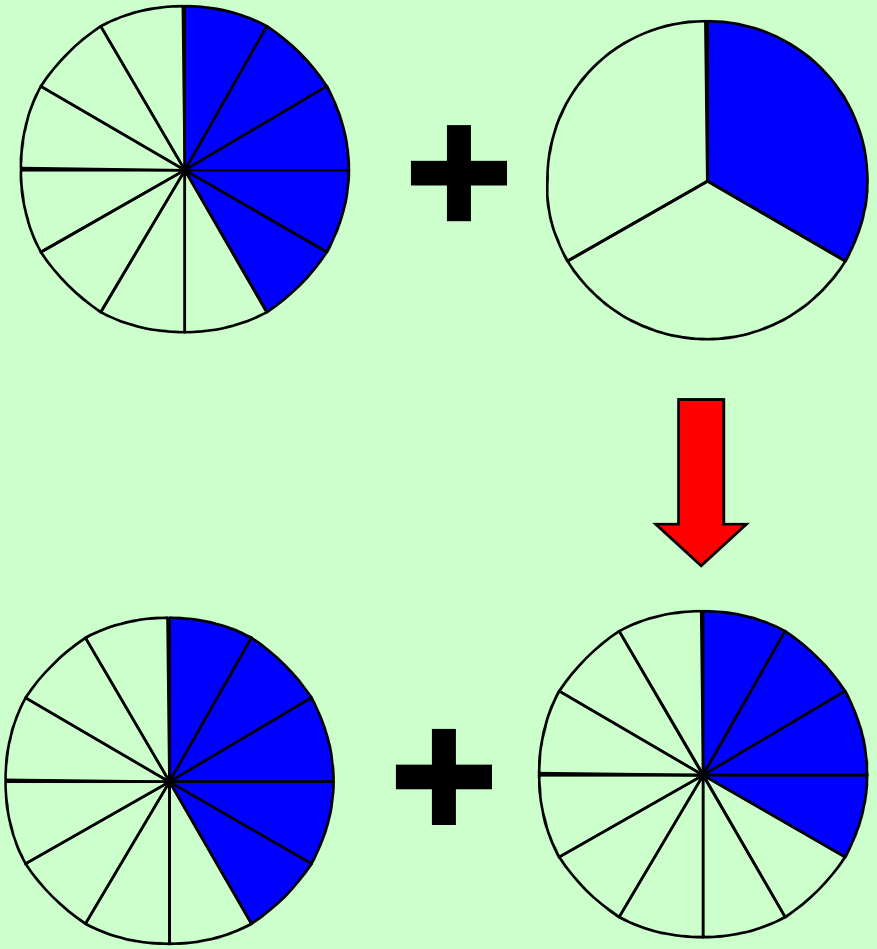
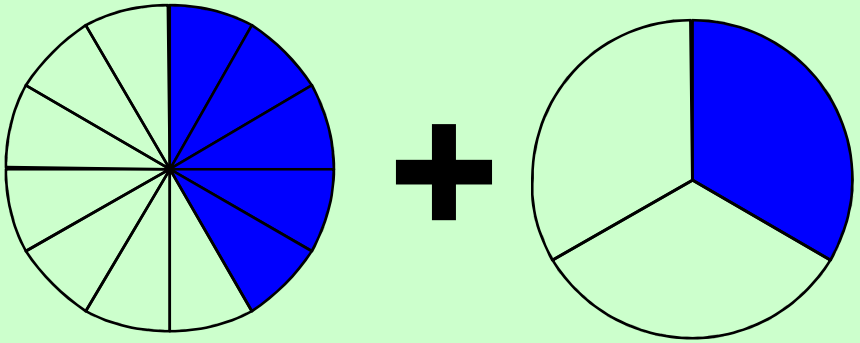
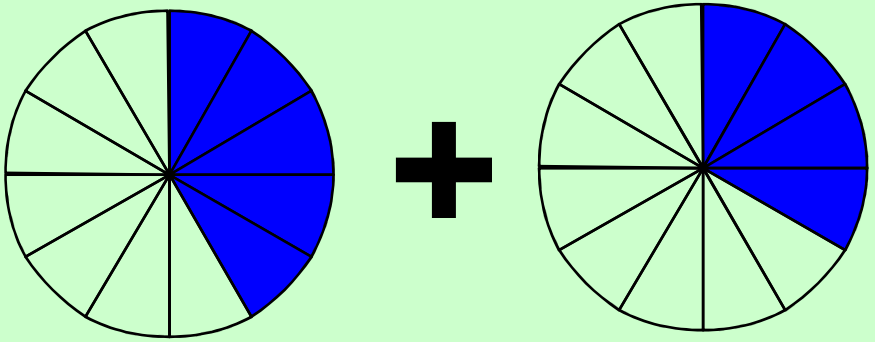
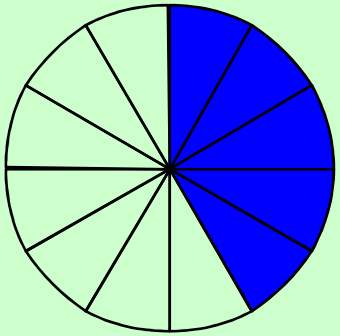


$$\frac{5}{12} + \frac{1}{3}$$



$$\frac{5}{12} + \frac{1}{3}$$





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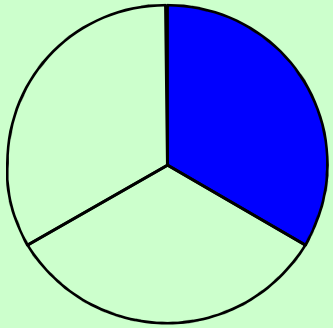
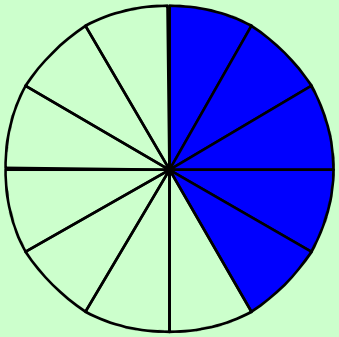


$\frac{5}{12} + \frac{1}{3}$



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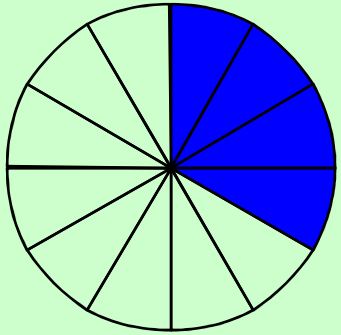
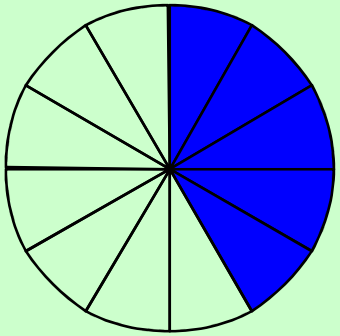


$\frac{5}{12}$



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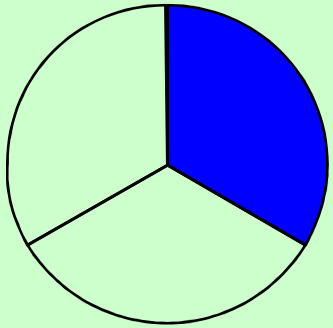
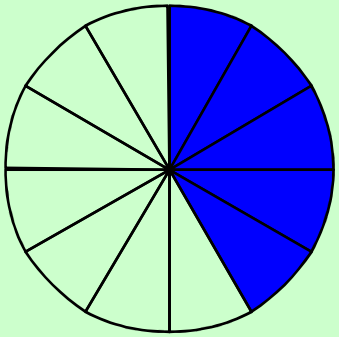


$\frac{5}{12} + \frac{1}{3}$



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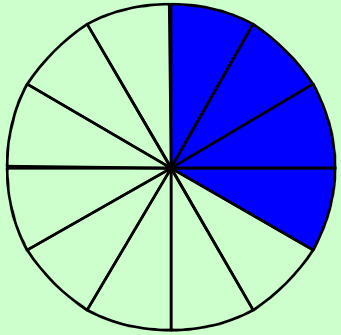
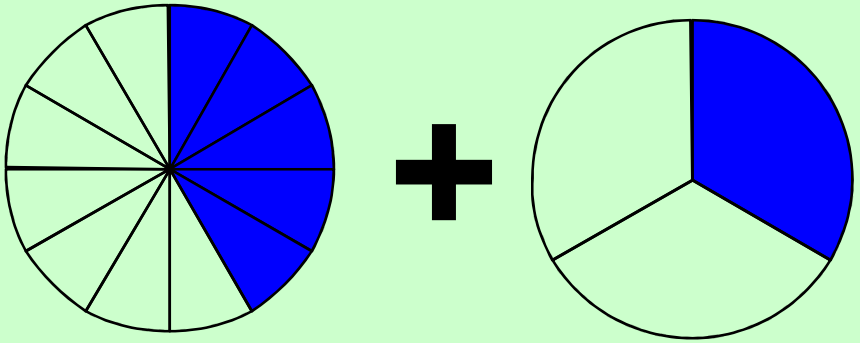
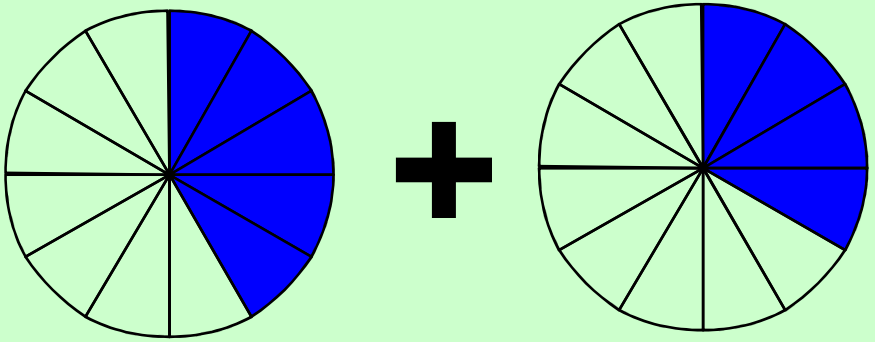


$\frac{5}{12} +$



$$\frac{5}{12} + \frac{1}{3}$$



$$\frac{5}{12} + \frac{4}{12}$$

$$\frac{5}{12} + \frac{4}{12}$$

$$\frac{5}{12} + \frac{4}{12} =$$

$$\frac{5}{12} + \frac{4}{12} = \frac{9}{12}$$

$$\frac{5}{12} + \frac{4}{12} = \frac{9}{12} =$$

$$\frac{5}{12} + \frac{4}{12} = \frac{9}{12} = \frac{3}{4}$$

1. Check denominators

1. Check denominators
2. Find equivalent fractions so denominators same

1. Check denominators
2. Find equivalent fractions so denominators same
3. Add numerators

1. Check denominators
2. Find equivalent fractions so denominators same
3. Add numerators
4. Cancel down if needed

1. Check denominators
2. Find equivalent fractions so denominators same
3. Add numerators
4. Cancel down if needed
5. Pull out the whole numbers if needed

Your turn…

$$\frac{2}{5} + \frac{3}{10}$$

$$\frac{7}{8} + \frac{3}{4}$$

$$\frac{2}{5}+\frac{3}{10}=\frac{4}{10}+\frac{3}{10}=\frac{7}{10}$$

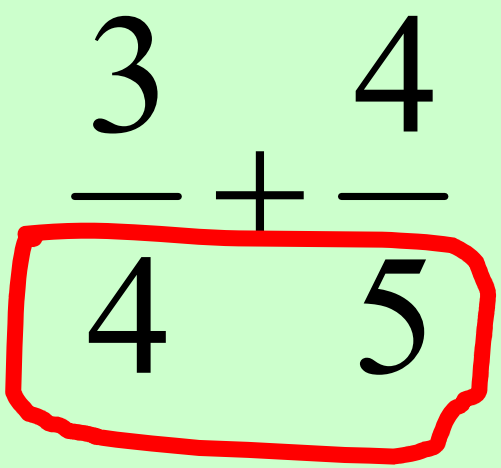
$$\frac{7}{8}+\frac{3}{4}$$

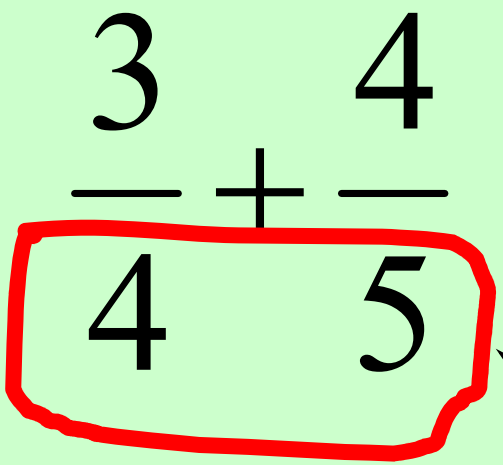
$$\frac{2}{5}+\frac{3}{10}=\frac{4}{10}+\frac{3}{10}=\frac{7}{10}$$

$$\frac{7}{8}+\frac{3}{4}=\frac{7}{8}+\frac{6}{8}=\frac{13}{8}=1\frac{5}{8}$$

Sometimes, you have to change *both* denominators…

$$\frac{3}{4} + \frac{4}{5}$$


3 4
— + —
4 5



You need a number that is a <u>multiple</u> of *both* 4 and 5…

$$\frac{3}{4} + \frac{4}{5} = \frac{?}{20} + \frac{?}{20}$$

$$\frac{3}{4} + \frac{4}{5} = \frac{?}{20} + \frac{?}{20}$$

$$= \frac{15}{20} + \frac{16}{20}$$

$$\frac{3}{4}+\frac{4}{5}=\frac{?}{20}+\frac{?}{20}$$

$$=\frac{15}{20}+\frac{16}{20}=\frac{31}{20}$$

$$\frac{3}{4}+\frac{4}{5}=\frac{?}{20}+\frac{?}{20}$$

$$=\frac{15}{20}+\frac{16}{20}=\frac{31}{20}=1\frac{11}{20}$$

1. Check denominators

1. Check denominators
2. Find ‘common denominator’ (LCM)

1. Check denominators
2. Find ‘common denominator’ (LCM)
3. Add numerators

1. Check denominators
2. Find ‘common denominator’ (LCM)
3. Add numerators
4. Cancel down if needed

1. Check denominators
2. Find ‘common denominator’ (LCM)
3. Add numerators
4. Cancel down if needed
5. Pull out the whole numbers if needed

Your turn…

$$\frac{1}{4} + \frac{2}{3}$$

$$\frac{1}{6} + \frac{3}{4}$$

$$\frac{1}{4}+\frac{2}{3}=\frac{3}{12}+\frac{8}{12}=\frac{11}{12}$$

$$\frac{1}{6}+\frac{3}{4}$$

$$\frac{1}{4}+\frac{2}{3}=\frac{3}{12}+\frac{8}{12}=\frac{11}{12}$$

$$\frac{1}{6}+\frac{3}{4}=\frac{2}{12}+\frac{9}{12}=\frac{11}{12}$$

Sometimes, you have to add fractions larger than one…

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

I suggest making these fractions ‘top heavy’.

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

$$2\frac{1}{2}+1\frac{1}{3} = \frac{5}{2}+\frac{4}{3}$$

$$2\frac{1}{2}+1\frac{1}{3} = \frac{5}{2}+\frac{4}{3}$$

$$= \frac{10}{6}+\frac{8}{6}$$

$$2\frac{1}{2}+1\frac{1}{3} = \frac{5}{2}+\frac{4}{3}$$

$$= \frac{10}{6}+\frac{8}{6}$$

$$= \frac{18}{6}$$

$$2\frac{1}{2}+1\frac{1}{3} = \frac{5}{2}+\frac{4}{3}$$

$$= \frac{10}{6}+\frac{8}{6}$$

$$= \frac{18}{6} = 3$$

Now find an exercise in the book or a work-sheet and practice!