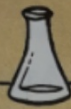


Jake mixes chemicals for the moulding machine.



1 eighth add 5 eighths is 6 eighths.

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



**1** Copy and complete.

(a)  $\frac{2}{5} + \frac{1}{5}$

(b)  $\frac{3}{10} + \frac{6}{10}$

(c)  $\frac{2}{8} + \frac{3}{8}$

(d)  $\frac{1}{4} + \frac{3}{4}$

(e)  $\frac{2}{6} + \frac{3}{6}$

(f)  $\frac{1}{10} + \frac{7}{10}$

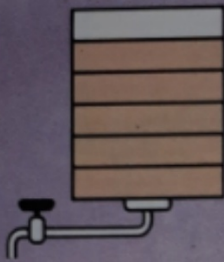
(g)  $\frac{2}{8} + \frac{4}{8}$

(h)  $\frac{2}{5} + \frac{2}{5}$

(i)  $\frac{2}{10} + \frac{3}{10}$

(j)  $\frac{1}{6} + \frac{3}{6}$

Mia drains  $\frac{1}{6}$  of this container.



5 sixths take away 1 sixth is 4 sixths.

$$\begin{aligned}\frac{5}{6} - \frac{1}{6} &= \frac{4}{6} \\ &= \frac{2}{3}\end{aligned}$$



2 Copy and complete.

(a)  $\frac{9}{10} - \frac{2}{10}$

(b)  $\frac{5}{6} - \frac{4}{6}$

(c)  $\frac{7}{8} - \frac{2}{8}$

(d)  $\frac{2}{3} - \frac{1}{3}$

(e)  $\frac{7}{10} - \frac{6}{10}$

(f)  $\frac{5}{8} - \frac{1}{8}$

(g)  $\frac{5}{6} - \frac{1}{6}$

(h)  $1 - \frac{2}{10}$

(i)  $1 - \frac{6}{8}$

(j)  $\frac{1}{2} - \frac{1}{4}$

The display on the plastic press shows the mixture of chemicals used.

5 eighths add 7 eighths is 12 eighths. That is 1 whole and 4 eighths.



$$\begin{aligned}\frac{5}{8} + \frac{7}{8} &= \frac{12}{8} \\ &= 1\frac{4}{8} = 1\frac{1}{2}\end{aligned}$$

**3** Copy and complete.

(a)  $\frac{9}{10} + \frac{2}{10}$

(b)  $\frac{5}{8} + \frac{4}{8}$

(c)  $\frac{4}{5} + \frac{4}{5}$

(d)  $\frac{5}{6} + \frac{2}{6}$

(e)  $\frac{2}{3} + \frac{2}{3}$

(f)  $\frac{8}{10} + \frac{4}{10}$

(g)  $\frac{3}{8} + \frac{7}{8}$

(h)  $\frac{5}{6} + \frac{3}{6}$

(i)  $\frac{8}{10} + \frac{7}{10}$

(j)  $\frac{3}{4} + \frac{3}{4}$

## Addition of fractions

**A1.**  $\frac{3}{5} + \frac{1}{5} =$

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

3.  $\frac{7}{20} + \frac{9}{20} =$

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

5.  $\frac{3}{16} + \frac{5}{16} =$

6.  $\frac{3}{8} + \frac{3}{8} =$

7.  $\frac{7}{15} + \frac{7}{15} =$

8.  $\frac{1}{6} + \frac{3}{6} =$

---

**B1.**  $\frac{3}{5} + \frac{3}{5} =$

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

3.  $\frac{7}{12} + \frac{11}{12} =$

4.  $\frac{5}{6} + \frac{5}{6} =$

5.  $\frac{17}{20} + \frac{11}{20} =$

6.  $\frac{7}{10} + \frac{9}{10} =$

7.  $\frac{11}{16} + \frac{15}{16} =$

8.  $\frac{6}{7} + \frac{6}{7} =$

---

**C1.**  $\frac{2}{5} + \frac{3}{10} =$

2.  $\frac{1}{2} + \frac{1}{4} =$

3.  $\frac{1}{4} + \frac{5}{8} =$

4.  $\frac{7}{20} + \frac{3}{5} =$

5.  $\frac{7}{16} + \frac{3}{8} =$

6.  $\frac{1}{6} + \frac{7}{12} =$

7.  $\frac{17}{20} + \frac{1}{40} =$

8.  $\frac{1}{3} + \frac{4}{9} =$

---

**D1.**  $\frac{4}{5} + \frac{7}{10} =$

2.  $\frac{3}{4} + \frac{5}{12} =$

3.  $\frac{9}{20} + \frac{3}{5} =$

4.  $\frac{5}{6} + \frac{11}{12} =$

5.  $\frac{6}{7} + \frac{11}{14} =$

6.  $\frac{4}{5} + \frac{7}{15} =$

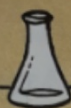
7.  $\frac{19}{24} + \frac{7}{12} =$

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

---

Choose challenge A, B or C to start. If you finish that section, choose one more challenge!

Jake mixes chemicals for the moulding machine.



1 eighth add 5 eighths is 6 eighths.

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



1 Copy and complete.

(a)  $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$

(b)  $\frac{3}{10} + \frac{6}{10} = \frac{9}{10}$

(c)  $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$

(d)  $\frac{1}{4} + \frac{3}{4} = \frac{4}{4} = 1$

(e)  $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

(f)  $\frac{1}{10} + \frac{7}{10} = \frac{8}{10}$   
 $= \frac{4}{5}$

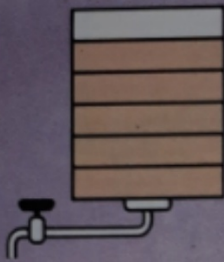
(g)  $\frac{2}{8} + \frac{4}{8} = \frac{6}{8} = \frac{3}{4}$

(h)  $\frac{2}{5} + \frac{2}{5} = \frac{4}{5}$

(i)  $\frac{2}{10} + \frac{3}{10} = \frac{5}{10} = \frac{1}{2}$

(j)  $\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$   
 $= \frac{2}{3}$

Mia drains  $\frac{1}{6}$  of this container.



5 sixths take away 1 sixth is 4 sixths.

$$\begin{aligned}\frac{5}{6} - \frac{1}{6} &= \frac{4}{6} \\ &= \frac{2}{3}\end{aligned}$$

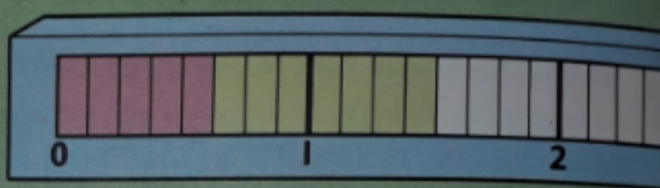


2 Copy and complete.

(a)  $\frac{9}{10} - \frac{2}{10} = \frac{7}{10}$  (b)  $\frac{5}{6} - \frac{4}{6} = \frac{1}{6}$  (c)  $\frac{7}{8} - \frac{2}{8} = \frac{5}{8}$  (d)  $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$  (e)  $\frac{7}{10} - \frac{6}{10} = \frac{1}{10}$   
(f)  $\frac{5}{8} - \frac{1}{8} = \frac{4}{8} = \frac{1}{2}$  (g)  $\frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$  (h)  $1 - \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$  (i)  $1 - \frac{6}{8} = \frac{2}{8} = \frac{1}{4}$  (j)  $\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$

The display on the plastic press shows the mixture of chemicals used.

5 eighths add 7 eighths is 12 eighths. That is 1 whole and 4 eighths.



$$\frac{5}{8} + \frac{7}{8} = \frac{12}{8}$$

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

### 3 Copy and complete.

(a)  $\frac{9}{10} + \frac{2}{10}$

(b)  $\frac{5}{8} + \frac{4}{8}$

(c)  $\frac{4}{5} + \frac{4}{5}$

(d)  $\frac{5}{6} + \frac{2}{6}$

(e)  $\frac{2}{3} + \frac{2}{3}$

(f)  $\frac{8}{10} + \frac{4}{10}$

(g)  $\frac{3}{8} + \frac{7}{8}$

(h)  $\frac{5}{6} + \frac{3}{6}$

(i)  $\frac{8}{10} + \frac{7}{10}$

(j)  $\frac{3}{4} + \frac{3}{4}$

a)  $\frac{11}{10} = 1\frac{1}{10}$

b)  $\frac{9}{8} = 1\frac{1}{8}$

c)  $\frac{8}{5} = 1\frac{3}{5}$

d)  $\frac{7}{6} = 1\frac{1}{6}$

e)  $\frac{4}{3} = 1\frac{1}{3}$

f)  $\frac{12}{10} = 1\frac{2}{10} = 1\frac{1}{5}$

g)  $\frac{10}{8} = 1\frac{2}{8} = 1\frac{1}{4}$

h)  $\frac{8}{6} = 1\frac{2}{6} = 1\frac{1}{3}$

i)  $\frac{15}{10} = 1\frac{5}{10} = 1\frac{1}{2}$

j)  $\frac{6}{4} = 1\frac{2}{4} = 1\frac{1}{2}$

## Addition of fractions

A1. $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$	2. $\frac{3}{10} + \frac{5}{10} = \frac{8}{10} = \frac{4}{5}$	3. $\frac{7}{20} + \frac{9}{20} = \frac{16}{20} = \frac{4}{5}$	4. $\frac{5}{12} + \frac{5}{12} = \frac{10}{12} = \frac{5}{6}$
5. $\frac{3}{16} + \frac{5}{16} = \frac{8}{16} = \frac{1}{2}$	6. $\frac{3}{8} + \frac{3}{8} = \frac{6}{8} = \frac{3}{4}$	7. $\frac{7}{15} + \frac{7}{15} = \frac{14}{15}$	8. $\frac{1}{6} + \frac{3}{6} = \frac{4}{6} = \frac{2}{3}$
B1. $\frac{3}{5} + \frac{3}{5} = \frac{6}{5} = 1\frac{1}{5}$	2. $\frac{7}{8} + \frac{5}{8} = \frac{12}{8} = \frac{4}{8} = \frac{1}{2}$	3. $\frac{7}{12} + \frac{11}{12} = \frac{18}{12} = \frac{6}{12} = \frac{1}{2}$	4. $\frac{5}{6} + \frac{5}{6} = \frac{10}{6} = \frac{4}{6} = \frac{2}{3}$
5. $\frac{17}{20} + \frac{11}{20} = \frac{28}{20} = \frac{8}{20} = \frac{2}{5}$	6. $\frac{7}{10} + \frac{9}{10} = \frac{16}{10} = \frac{6}{10} = \frac{3}{5}$	7. $\frac{11}{16} + \frac{15}{16} = \frac{26}{16} = \frac{10}{16} = \frac{5}{8}$	8. $\frac{6}{7} + \frac{6}{7} = \frac{12}{7} = 1\frac{5}{7}$
C1. $\frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$	2. $\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$	3. $\frac{1}{4} + \frac{5}{8} = \frac{2}{8} + \frac{5}{8} = \frac{7}{8}$	4. $\frac{7}{20} + \frac{3}{5} = \frac{7}{20} + \frac{12}{20} = \frac{19}{20}$
5. $\frac{7}{16} + \frac{3}{8} = \frac{7}{16} + \frac{6}{16} = \frac{13}{16}$	6. $\frac{1}{6} + \frac{7}{12} = \frac{2}{12} + \frac{7}{12} = \frac{9}{12} = \frac{3}{4}$	7. $\frac{17}{20} + \frac{1}{40} = \frac{34}{40} + \frac{1}{40} = \frac{35}{40} = \frac{7}{8}$	8. $\frac{1}{3} + \frac{4}{9} = \frac{3}{9} + \frac{4}{9} = \frac{7}{9}$
D1. $\frac{4}{5} + \frac{7}{10} = \frac{8}{10} + \frac{7}{10} = \frac{15}{10} = \frac{5}{10} = \frac{1}{2}$	2. $\frac{3}{4} + \frac{5}{12} = \frac{9}{12} + \frac{5}{12} = \frac{14}{12} = \frac{2}{12} = \frac{1}{6}$	3. $\frac{9}{20} + \frac{3}{5} = \frac{9}{20} + \frac{12}{20} = \frac{21}{20} = \frac{1}{20}$	4. $\frac{5}{6} + \frac{11}{12} = \frac{10}{12} + \frac{11}{12} = \frac{21}{12} = \frac{3}{4}$
5. $\frac{6}{7} + \frac{11}{14} = \frac{12}{14} + \frac{11}{14} = \frac{23}{14} = 1\frac{9}{14}$	6. $\frac{4}{5} + \frac{7}{15} = \frac{12}{15} + \frac{7}{15} = \frac{19}{15} = 1\frac{4}{15}$	7. $\frac{19}{24} + \frac{7}{12} = \frac{19}{24} + \frac{14}{24} = \frac{33}{24} = \frac{11}{8} = 1\frac{3}{8}$	8. $\frac{7}{8} + \frac{3}{4} = \frac{7}{8} + \frac{6}{8} = \frac{13}{8} = 1\frac{5}{8}$

Choose challenge A, B or C to start. If you finish that section, choose one more challenge!