

Making Like Units: Addition

Area Models
M3 L3-4

Creating an Model

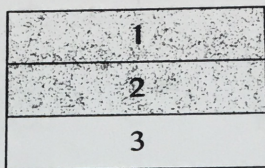
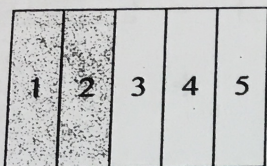
1. Represent the first fractional unit with vertical lines.
2. Represent the second fractional unit with horizontal lines on another model.
3. Overlap the lines on both models.
4. Like unit is the new number of fractional units in one model.
5. The sum is found by counting the number of shaded like unit sections in both models.

UNLIKE UNITS:

$$\frac{2}{5}$$

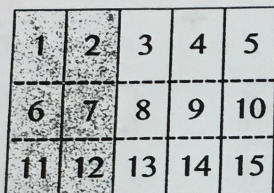
+

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



LIKE UNITS:
Same

amount of
shaded
area.



$$\frac{6}{15}$$

+

$$\frac{10}{15}$$

=

$$\frac{16}{15}$$

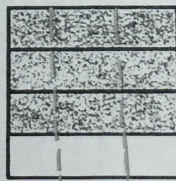
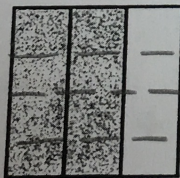
6 fifteenths + 10 fifteenths = 16 fifteenths

1.

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

+

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



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

+

$$\frac{9}{12}$$

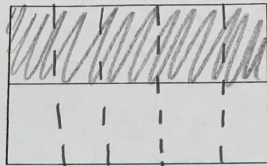
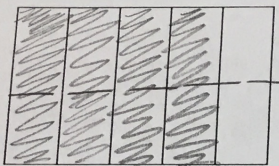
$$= \frac{17}{12} = 1\frac{5}{12}$$

8 twelfths + 9 twelfths = 17 twelfths

Making Like Units: Addition

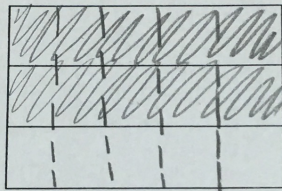
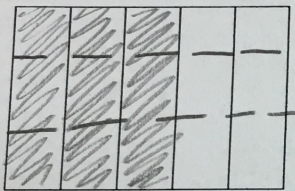
Area Models
M3 L3-4

2. $\frac{4}{5} + \frac{1}{2}$



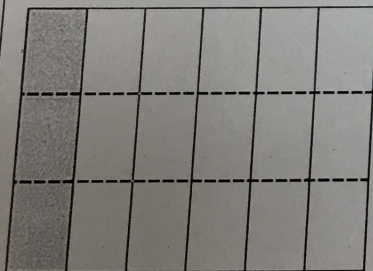
$$\frac{8}{10} + \frac{5}{10} = \frac{13}{10} = 1\frac{3}{10}$$

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

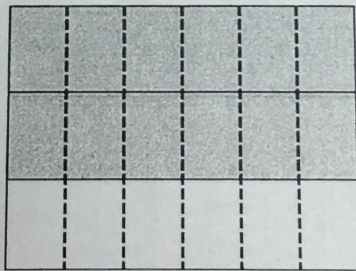


$$\frac{9}{15} + \frac{10}{15} = \frac{19}{15} = 1\frac{4}{15}$$

4. What addition expression is represented in the model below?



+



=

$$\frac{3}{18} + \frac{12}{18} = \frac{15}{18} = \frac{5}{6}$$