



1 whole

## Checking

1. Model each improper fraction. Use four linking cubes to represent one whole. Sketch your models.
  - a)  $\frac{7}{4}$
  - b)  $\frac{9}{4}$
  - c)  $\frac{7}{2}$
  - d)  $\frac{9}{2}$
2. Brittany can fill  $\frac{1}{8}$  of a carton in 5 min. Use a fraction to represent the number of cartons she can fill in 50 min.



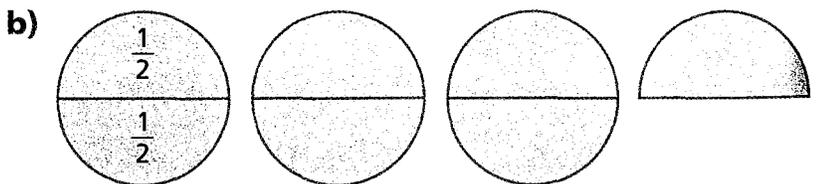
1 whole

## Practising

3. Use three linking cubes to represent one whole, or  $\frac{3}{3}$ . What improper fraction does each model below show? Explain.



4. Suppose that you can fill  $\frac{1}{3}$  of a carton in 5 min. How can you use counting by thirds to figure out the improper fraction that describes the number of cartons you can fill in 40 min?
5. What improper fraction does each diagram show?



6. a) Model  $\frac{6}{5}$  and  $\frac{17}{4}$  using linking cubes. Sketch your models. Circle one whole in each sketch.  
 b) How many cubes did you use to model the whole in part a)? How did you decide on the number of cubes to use?

7. a) Make a model or a diagram to show each of these fractions: 8 fourths, 9 fourths, 10 fourths, 11 fourths, and 12 fourths.  
 b) Write an improper fraction for each model or diagram you made in part a).  
 c) Which fractions in part b) are equal to whole numbers?

8. Use diagrams to show each pair of fractions. How are your two diagrams the same? How are they different?

a)  $\frac{7}{2}$  and  $\frac{7}{9}$

b)  $\frac{3}{2}$  and  $\frac{5}{2}$

9. Keegan and his brother can mow  $\frac{1}{2}$  of a lawn in 30 min.

a) How do you know that they can mow between two and three lawns with the same area in 150 min?

b) What improper fraction represents the number of lawns they can mow in 150 min?

10. Use each of the digits 4, 5, 6, and 7 once so that all the statements are true.

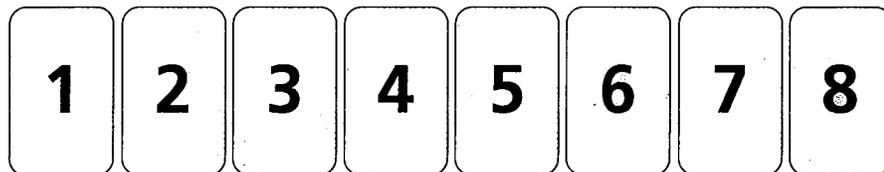
$\frac{\square}{3} > 1$

$\frac{\square}{6} > 1$

$\frac{\square}{5} = 1$

$\frac{5}{\square} > 1$

11. Use the cards below as the numerators and denominators of four fractions. Use each number only once. What is the greatest number of improper fractions you can create? Explain your thinking.



12. Chelsea thinks the model below shows  $\frac{5}{6}$ . Rhonda thinks it shows  $\frac{6}{5}$ . How can they both be right?



13. How are proper fractions and improper fractions the same? How are they different?

