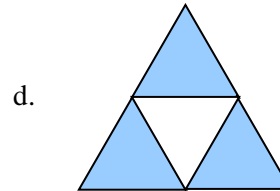
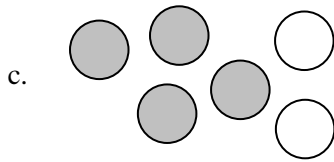
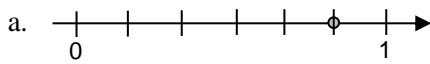


# Fraction Concepts

Answer in your notebook

1. Name the fraction shown by:



2. Write the fraction three-fifths:

- a. as a common fraction      b. as a quotient      c. as a ratio

3. Draw a rectangle. Accurately shade in  $\frac{2}{5}$  of the rectangle.

4. a. On a number line, show the fraction  $\frac{3}{10}$ .

b. On the same number line, show the fraction  $\frac{9}{10}$ .

5. Draw a circle. Accurately shade in  $\frac{1}{6}$  of the circle.


6. Draw a group of 12 circles. Circle three-quarters of this group.



7. What fraction of the months have a name that begins with J?

8. The diagram alongside is a rectangular cake. What fraction of this cake is shaded?



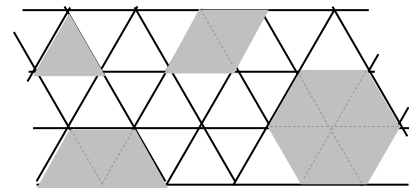
9. a. Name each of the 4 shapes alongside.

b. If  = 1,  = ?

c. If  = 1,  = ?

d. If  = 1,  = ?

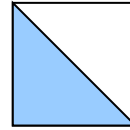
e. If  = 1,  = ?



10. Tahnee drew the diagram alongside and said, “2 thirds of the rectangle is shaded.” Explain what mistake Tahnee has made.

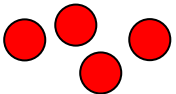


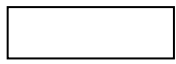
11. The diagram alongside shows one way of shading half of a square. Show **four** other ways of shading half of a square.



12. Write a fraction that is smaller than  $\frac{1}{2}$ .

13. a. This is  $\frac{1}{4}$ .  Draw the whole.

- b. This is  $\frac{4}{6}$ .  What is the whole?

- c. This is  $\frac{4}{5}$ .  Draw the whole.

- d. This is  $\frac{3}{8}$ .  Draw the whole.

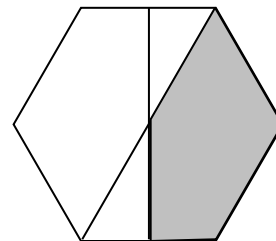
### Problem Solving




14. What is the four digit number in which the first digit is  $\frac{1}{4}$  of the last digit, the second digit is 6 times the first digit, and the third digit is the second digit plus 3?
15. I am a common fraction. My denominator is 4 times my numerator. What fraction might I be? Give at least 3 answers.
16. I am a common fraction. My denominator is 5 times my numerator. My numerator is a prime number. What fraction might I be? Give at least 3 answers.
17. I am a common fraction. My denominator is 3 times my numerator. My numerator is a square number. My denominator is a cube number. What fraction might I be?

### Challenge

18. What number is 30 more than one quarter of itself?
19. Jonno, Josie and Jeannie shared a cake. Jonno had twice as much as Josie. Josie had twice as much as Jeannie. What fraction of the cake did each have?

20. What fraction of the hexagon alongside is shaded?  
*Hint: copy the diagram and draw some extra lines.*



21. If  +  = 1,  = ?