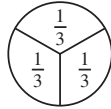


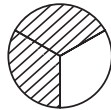
A *Example*

This shape has been cut into 3 equal parts.

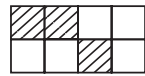
Each part is $\frac{1}{3}$ (ONE THIRD).



If 2 parts are shaded, what fraction is shaded?



The shaded fraction is $\frac{2}{3}$ (TWO THIRDS)

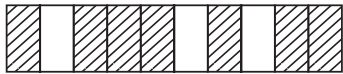
B *Examples*

How many equal parts? 8

What fraction is each part? $\frac{1}{8}$ (ONE EIGHTH)

How many parts are shaded? 3

What fraction is shaded? $\frac{3}{8}$ (THREE EIGHTHS)



How many equal parts? 10

What fraction is each part? $\frac{1}{10}$ (ONE TENTH)

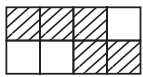
How many parts are shaded? 7

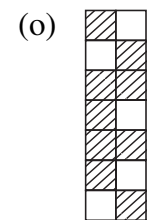
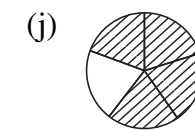
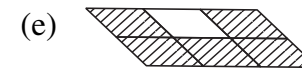
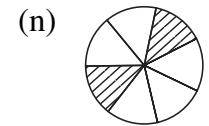
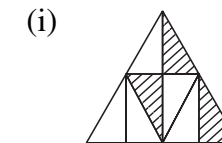
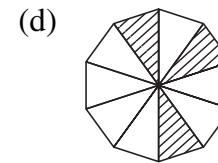
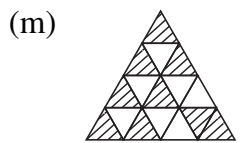
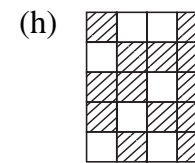
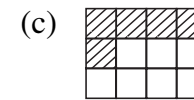
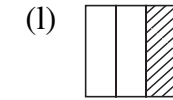
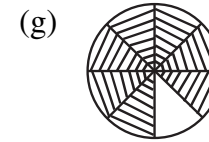
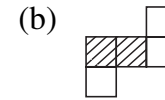
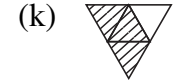
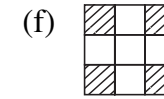
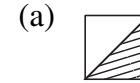
What fraction is shaded? $\frac{7}{10}$ (SEVEN TENTHS)

What fraction is UNSHADED (not shaded)?

$\frac{3}{10}$ (THREE TENTHS)


1. In each of these shapes, what fraction is shaded?

(Example  $\frac{5}{8}$)



2. In each of the shapes on this page, what fraction is UNSHADED (not shaded)?


A When 1 (one whole) is divided by 2, the result is $\frac{1}{2}$ (ONE HALF)

 divided by 2 equals $\frac{1}{2}$

$$1 \div 2 = \frac{1}{2}$$

1 over 2 ($\frac{1}{2}$) means 1 divided by 2


B When $\frac{1}{2}$ is added to $\frac{1}{2}$, the result is 1

$\frac{1}{2}$ add $\frac{1}{2}$ equals 



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

C Addition of halves




Examples

$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$  $\frac{1}{2}$ (half + half + half equals ONE AND A HALF)

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

$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$   (half + half + half + half equals TWO)

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

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

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

D Multiplication of halves

Examples

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

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

1. (Example $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1\frac{1}{2}$ Just write the answers. No need to draw pictures)

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

(b) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(c) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(d) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(e) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(f) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(g) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(h) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(i) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

(j) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

2. (Example $\frac{1}{2} \times 5 = 2\frac{1}{2}$)

(a) $\frac{1}{2} \times 2$

(f) $\frac{1}{2} \times 16$

(b) $\frac{1}{2} \times 11$

(g) $\frac{1}{2} \times 7$

(c) $\frac{1}{2} \times 14$

(h) $\frac{1}{2} \times 19$

(d) $\frac{1}{2} \times 4$

(i) $\frac{1}{2} \times 1$

(e) $\frac{1}{2} \times 9$

(j) $\frac{1}{2} \times 15$