

18) a.

Answer

$$\frac{1}{6} + \frac{1}{3} = \frac{1}{6} + \frac{2}{6}$$

$$= \frac{3}{6}$$

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

**Answer:**  $\frac{1}{2}$

1

1

Total:

2

Method

Before you can add the two fractions, you must change one or both of them so that they have the same denominator (bottom number).

$2 \times 3 = 6$ , so you can multiply both the numerator and denominator of  $\frac{1}{3}$  by 2 to convert it into sixths  $\left(\frac{2}{6}\right)$ .

You can now add the numerators of the two fractions ( $1 + 2$ ) to give  $\frac{3}{6}$ .

You should always give a fraction in its simplest (lowest) terms unless told otherwise. The HCF of 3 and 6 is 3, so divide both the numerator and the denominator by 3 to give a final answer of  $\frac{1}{2}$ .

Top Tip

When you are adding or subtracting fractions, the denominator (bottom number) of both fractions must be the same. This means that you may have to change one or both of the fractions.

Look for a common factor or multiple. Then remember to multiply or divide both the numerator and denominator by the same number to produce an equivalent fraction.