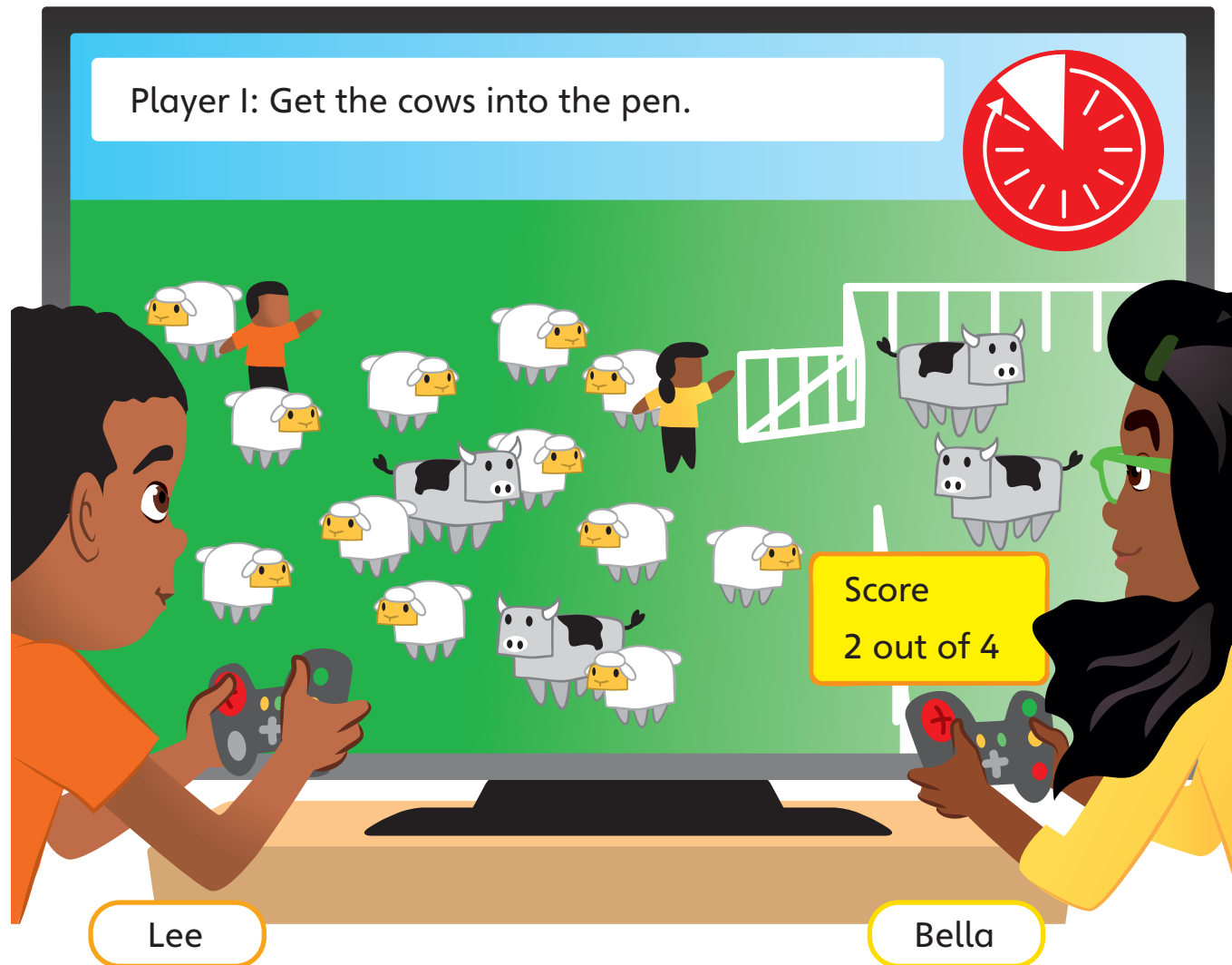


Simplifying fractions

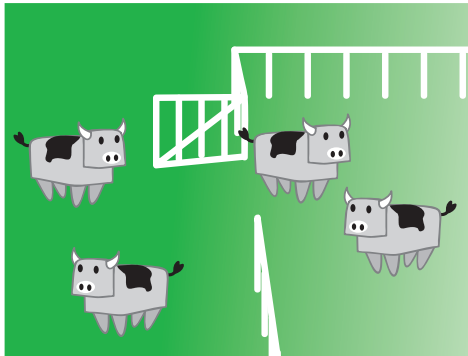
Discover



- 1** a) Bella gets 2 cows into the pen before the time runs out.
What is her score? Give your answer as a fraction in its simplest form.
- b) Lee gets 9 of the 12 sheep into the pen.
What is his score? Give your answer as a fraction in its simplest form.

Share

a)



Bella's score is 2 out of 4.

We can write this fraction as $\frac{2}{4}$.



$$\begin{array}{c} \div 2 \\ \curvearrowright \\ \frac{2}{4} = \frac{1}{2} \\ \curvearrowleft \\ \div 2 \end{array}$$

$\frac{2}{4}$ can be simplified to $\frac{1}{2}$. Bella's score is $\frac{1}{2}$.

To find a fraction's simplest form we divide the numerator and the denominator by a **common factor**.



I divided the numerator and denominator by 2 because 2 is a common factor of 2 and 4.



b) Lee gets $\frac{9}{12}$ of the sheep in the pen.



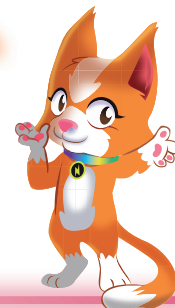
We can divide the numerator and the denominator by 3 because 3 is a common factor of 9 and 12.

$$\begin{array}{c} \div 3 \\ \curvearrowright \\ \frac{9}{12} = \frac{3}{4} \\ \curvearrowleft \\ \div 3 \end{array}$$



Lee's score is $\frac{3}{4}$.

These fractions represent the same amount, but one is written in its simplest form.



Simplifying fractions

1 Write in the missing numbers to simplify the fractions.

a)



$$\frac{3}{12} = \frac{1}{\boxed{}}$$

$\div 3$

$$\div 3$$

b)

$$\frac{35}{42} = \frac{\boxed{}}{\boxed{}}$$

$\div 7$

$$\div \boxed{}$$

c)

$$\frac{25}{35} = \frac{\boxed{}}{\boxed{}}$$

$\div \boxed{}$

$$\div \boxed{}$$

2 Simplify these fractions.

a) $\frac{14}{24} = \frac{\boxed{}}{\boxed{}}$

c) $\frac{20}{45} = \frac{\boxed{}}{\boxed{}}$

e) $\frac{72}{\boxed{}} = \frac{9}{10}$

b) $\frac{6}{15} = \frac{\boxed{}}{\boxed{}}$

d) $\frac{12}{16} = \frac{\boxed{}}{\boxed{}}$

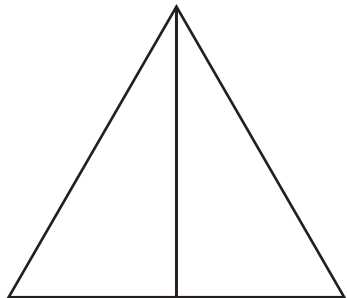
f) $\frac{\boxed{}}{24} = \frac{3}{4}$

3 Write in the missing numbers.

$$\frac{90}{120} = \frac{\boxed{}}{60} = \frac{15}{\boxed{}} = \frac{\boxed{}}{4}$$

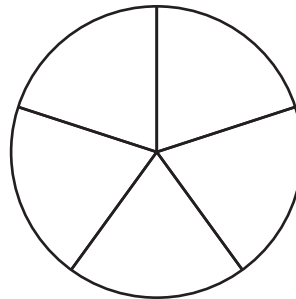
4 Shade in the shapes to show the fractions.

a)



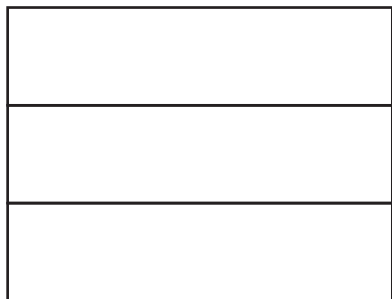
$$\frac{10}{20}$$

c)



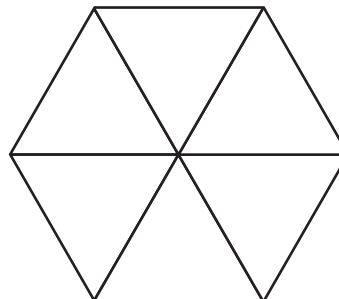
$$\frac{20}{25}$$

b)



$$\frac{6}{9}$$

d)



$$\frac{45}{54}$$

5 Ebo thinks $\frac{4}{6}$ in its simplest form is $\frac{1}{1.5}$.

Is Ebo correct? Explain how you know.

6 Circle the fraction that is **not** equivalent to the other fractions.

a) $\frac{5}{15}$ $\frac{15}{45}$ $\frac{10}{20}$ $\frac{20}{60}$

b) $\frac{12}{18}$ $\frac{120}{180}$ $\frac{18}{24}$ $\frac{24}{36}$