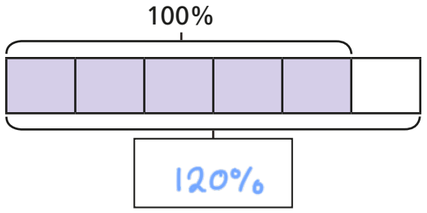
# Solve problems with fractions greater than 1 and percentages greater than 100%

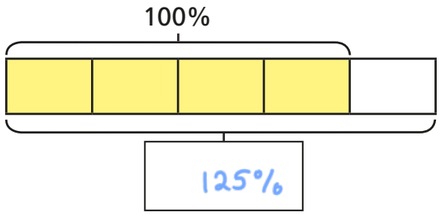
H

**1** Fill in the missing percentages.

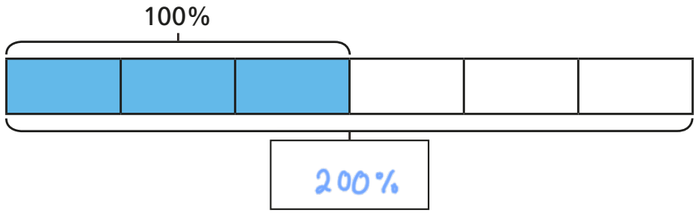
**a)**



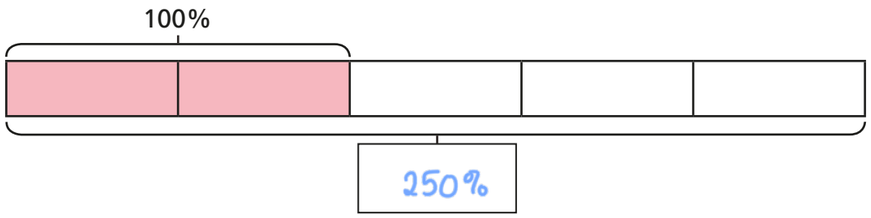

**b)**




**c)**




**d)**




**2** Use the bar models in question 1 to calculate the values.

**a)** 120% of 60 = 72

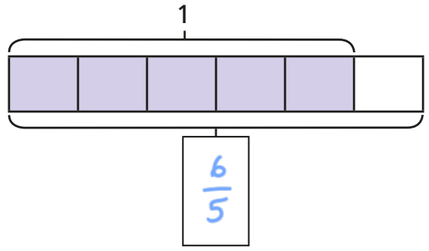
**b)** 125% of 60 = 75

**c)** 200% of 60 = 120

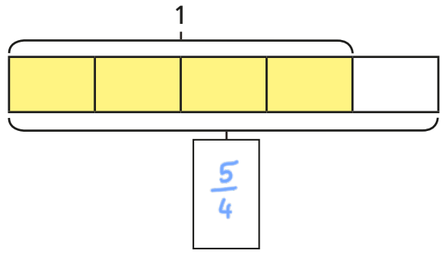
**d)** 250% of 60 = 150

**3** Fill in the missing fractions.

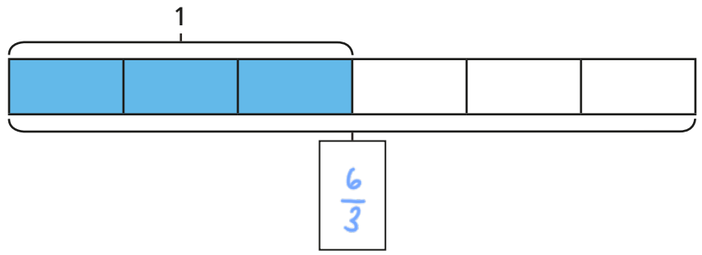
**a)**



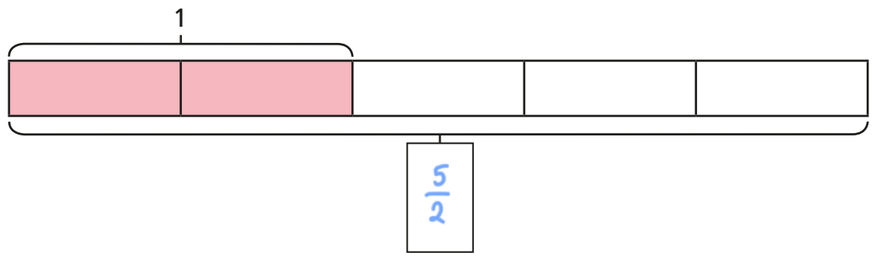

**b)**




**c)**




**d)**




**4** Use the bar models in question 3 to fill in the missing values.

**a)** $\frac{6}{5}$ of 80 = 96

**b)** $\frac{5}{4}$ of 80 = 100

**c)** $\frac{6}{3}$ of 80 = 160

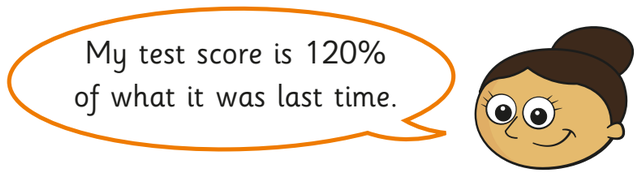
**d)** $\frac{5}{2}$ of 80 = 200

**5** **a)**


Is this possible? No

Explain your answer to a partner.

**b)**




Is this possible? Yes

Explain your answer to a partner.

**6** A kitten was weighed when it was born.

After two weeks the kitten's weight had increased by 160%.

By what fraction had the kitten's weight increased?

$\frac{8}{5}$

**7** A bottle of orange juice contains free extra juice as a special offer.


What percentage is the new amount of the original amount?

175%

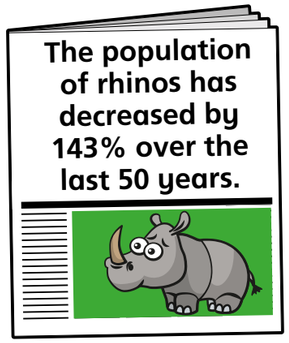
What fraction is the new amount of the original amount?

$\frac{7}{4}$

**8** Match the equivalent cards.

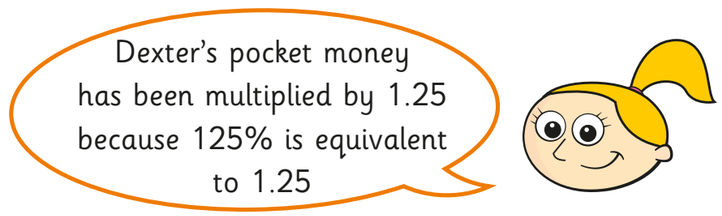
| | | |
|---|---|---|
| $\frac{9}{4}$ | 1.5 | 120% |
| $\frac{3}{2}$ | 1.25 | 225% |
| $\frac{6}{5}$ | 2.25 | 150% |
| $\frac{5}{4}$ | 1.2 | 125% |

**9**




Is the newspaper article accurate?

**10** Dexter receives a 125% increase in his pocket money.




Explain the mistake that Eva has made.

It has increased by 125% so 100% + 125% = 225%

and its been multiplied by 2·25