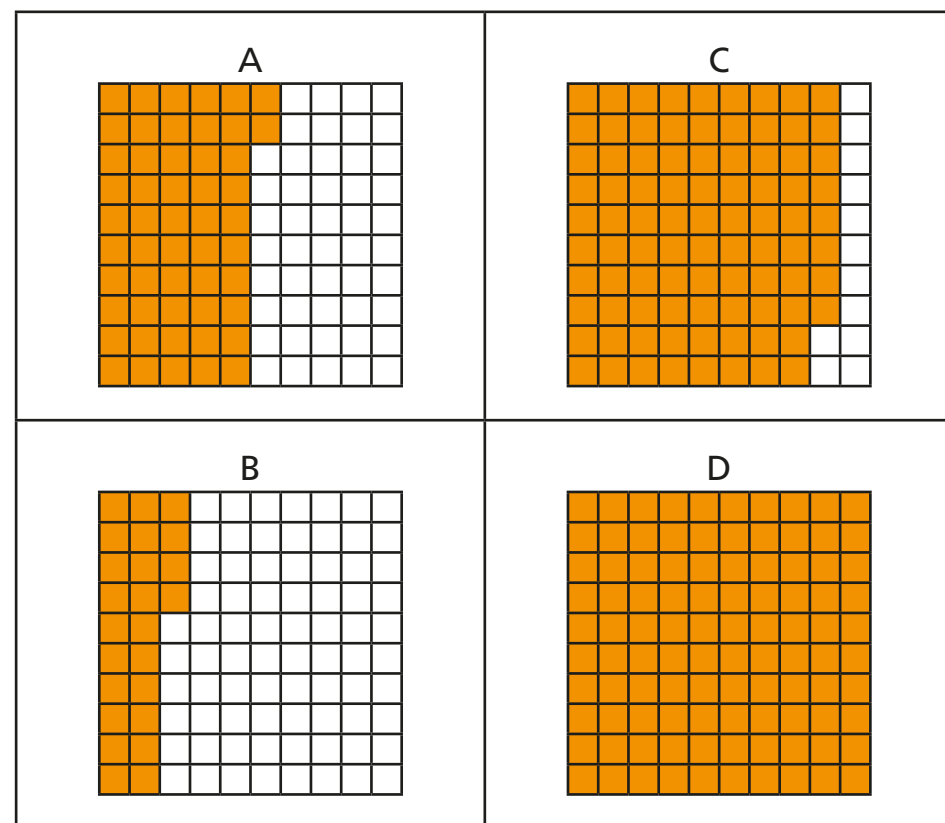


Percentages as fractions and decimals

1 Here are four hundred squares.

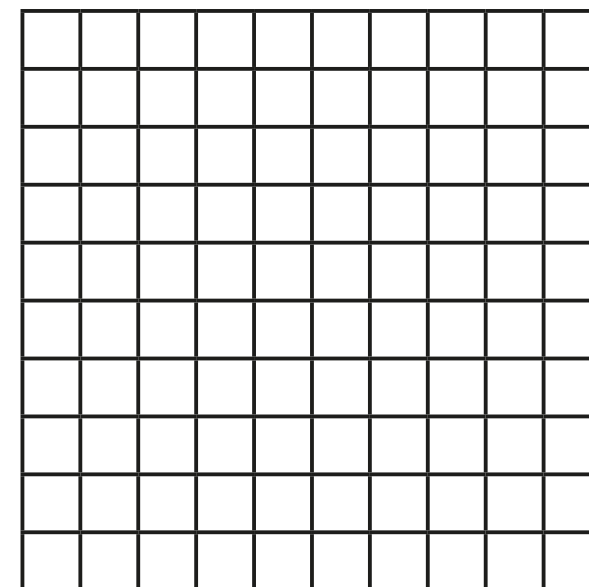


Complete the table.

Hundred square	Percentage	Fraction	Decimal
A		$\frac{52}{100}$	
B			
C			
D			

2 Prove that 0.2 is equal to 20%.

You may use the hundred square to help you.



Why do you think some people think that 0.2 is equal to 2%?

3 Complete the fraction, decimal and percentage equivalents.

a) $32\% = \frac{\boxed{}}{100} = \boxed{}$

$35\% = \frac{\boxed{}}{100} = \boxed{}$

$48\% = \frac{\boxed{}}{100} = \boxed{}$

c) $0.29 = \boxed{}\% = \frac{\boxed{}}{100}$

$0.71 = \boxed{}\% = \frac{\boxed{}}{100}$

$0.03 = \boxed{}\% = \frac{\boxed{}}{100}$

b) $\frac{17}{100} = \boxed{}\% = \boxed{}$

$\frac{9}{100} = \boxed{}\% = \boxed{}$

$\frac{90}{100} = \boxed{}\% = \boxed{}$

4 Write $<$, $>$ or $=$ to complete the statements.

- a) 50% $\frac{5}{100}$ d) $\frac{40}{100}$ 40%
- b) 25% $\frac{50}{100}$ e) $\frac{70}{100}$ 7%
- c) 14% $\frac{41}{100}$ f) 82% $\frac{82}{100}$

5 Write the values in order from smallest to greatest.

- a) 33% $\frac{30}{100}$ 3% $\frac{13}{100}$
- _____
- b) 299% $\frac{91}{100}$ 9% $\frac{9}{10}$
- _____
- c) 2.5 $\frac{25}{100}$ 250 25% of 100 $\frac{25}{1000}$
- _____

6 Convert the fractions to hundredths.

Complete the decimal and percentage equivalents.

- a) $\frac{150}{300} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$
- b) $\frac{25}{500} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$
- c) $\frac{48}{300} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

- d) $\frac{18}{50} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$
- e) $\frac{13}{25} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

7 Circle all the fractions that are greater than or equal to 50% .

- $\frac{10}{50}$ $\frac{4}{5}$ $\frac{50}{100}$
- $\frac{30}{80}$ $\frac{1}{50}$ $\frac{70}{140}$

8 Jack and Dora go shopping with the same amount of money.

Jack spends $\frac{1}{3}$ of his money.

Dora spends 30% of her money.

a) Who spends more money? _____

Use fraction and percentage equivalence to explain your answer.

b) Jack and Dora each started with £300

How much money do they each have left?

Jack Dora