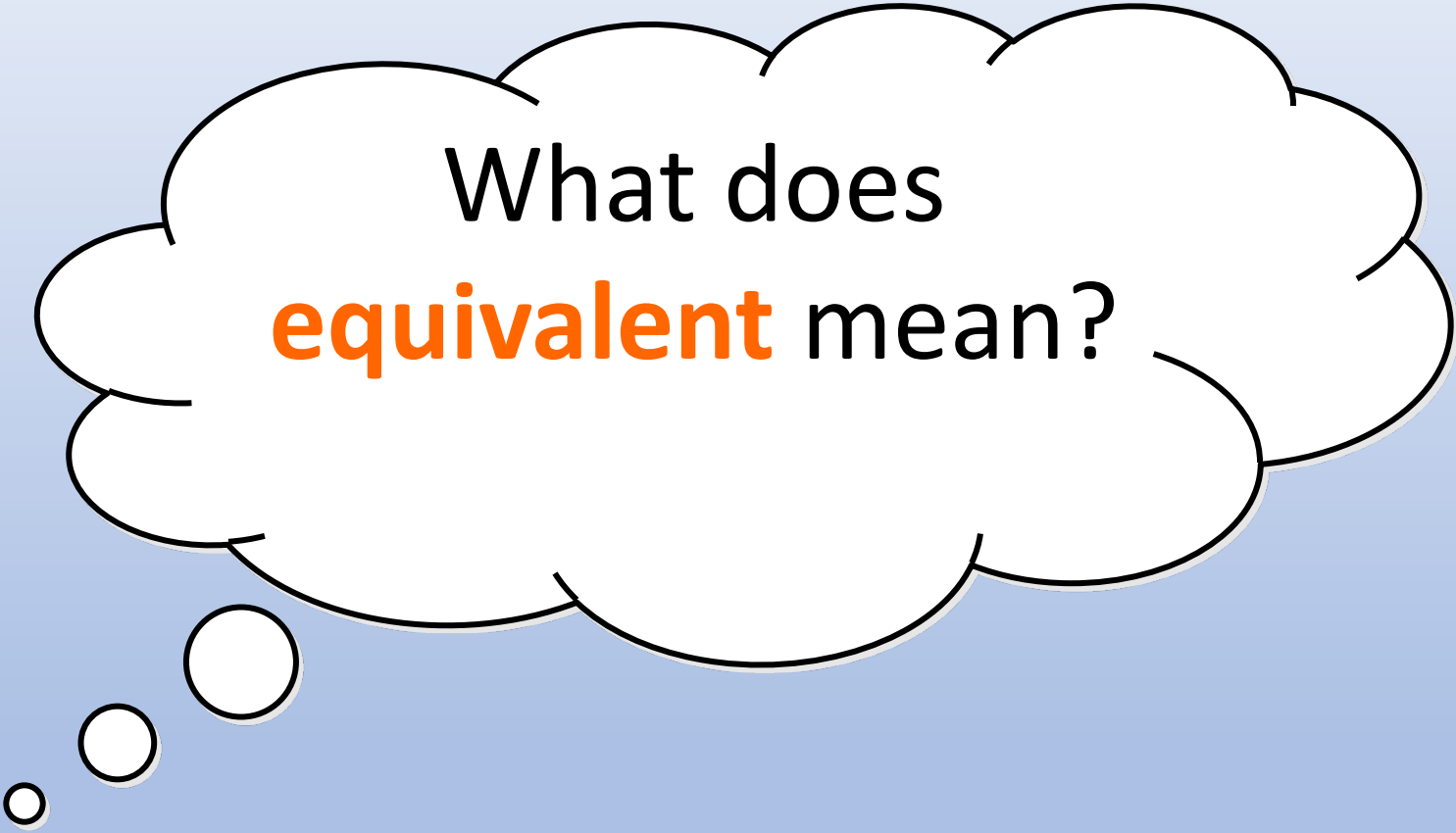


Equivalent fractions



What does
equivalent mean?

Learning Objective: To be able to Understand equivalent fractions.

Equivalent fractions

$$\frac{2}{10}$$

$$\frac{20}{100}$$

$$\frac{10}{50}$$

Learning Objective: To be able to Understand equivalent fractions.

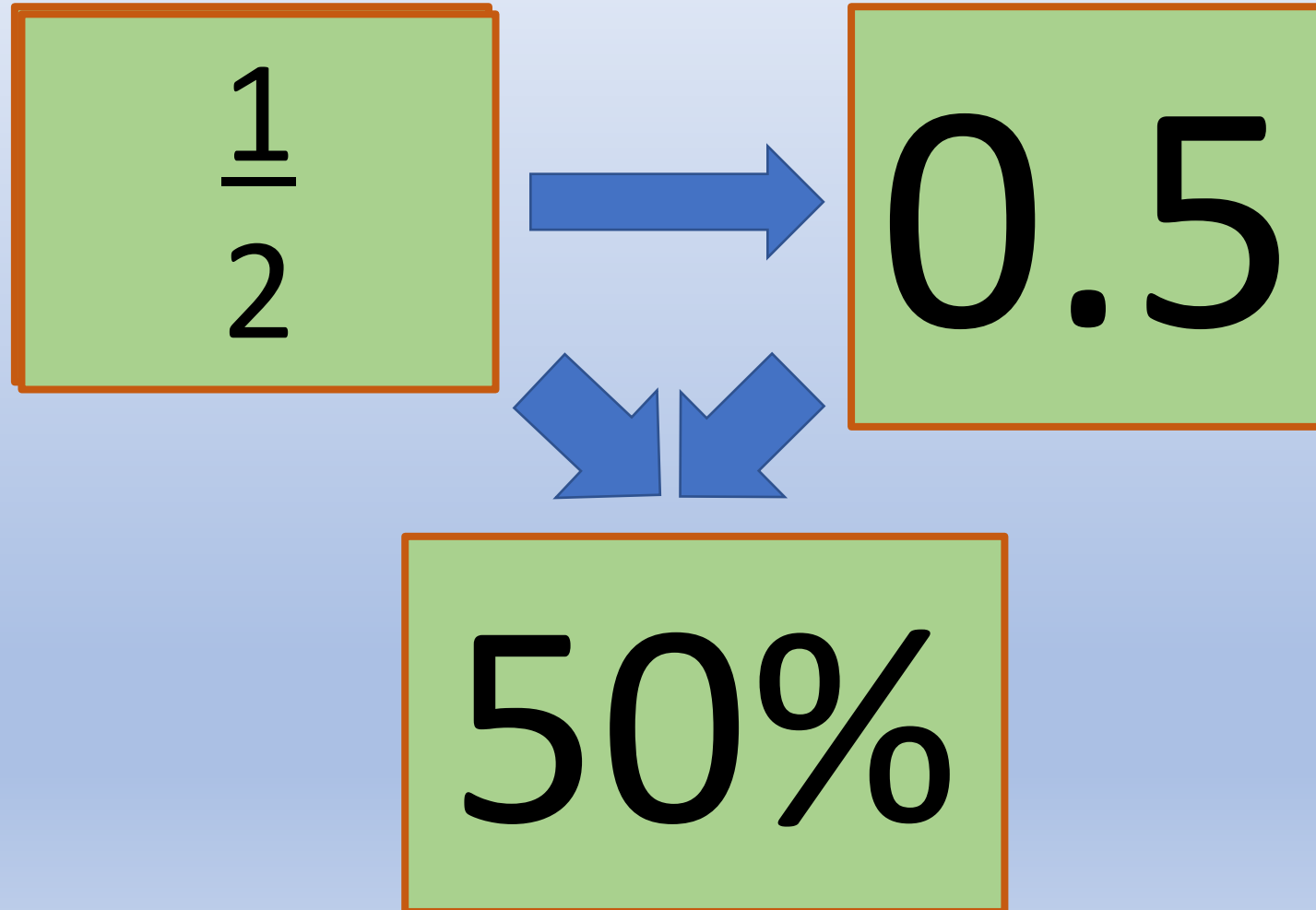
Write down Three equivalent fractions of

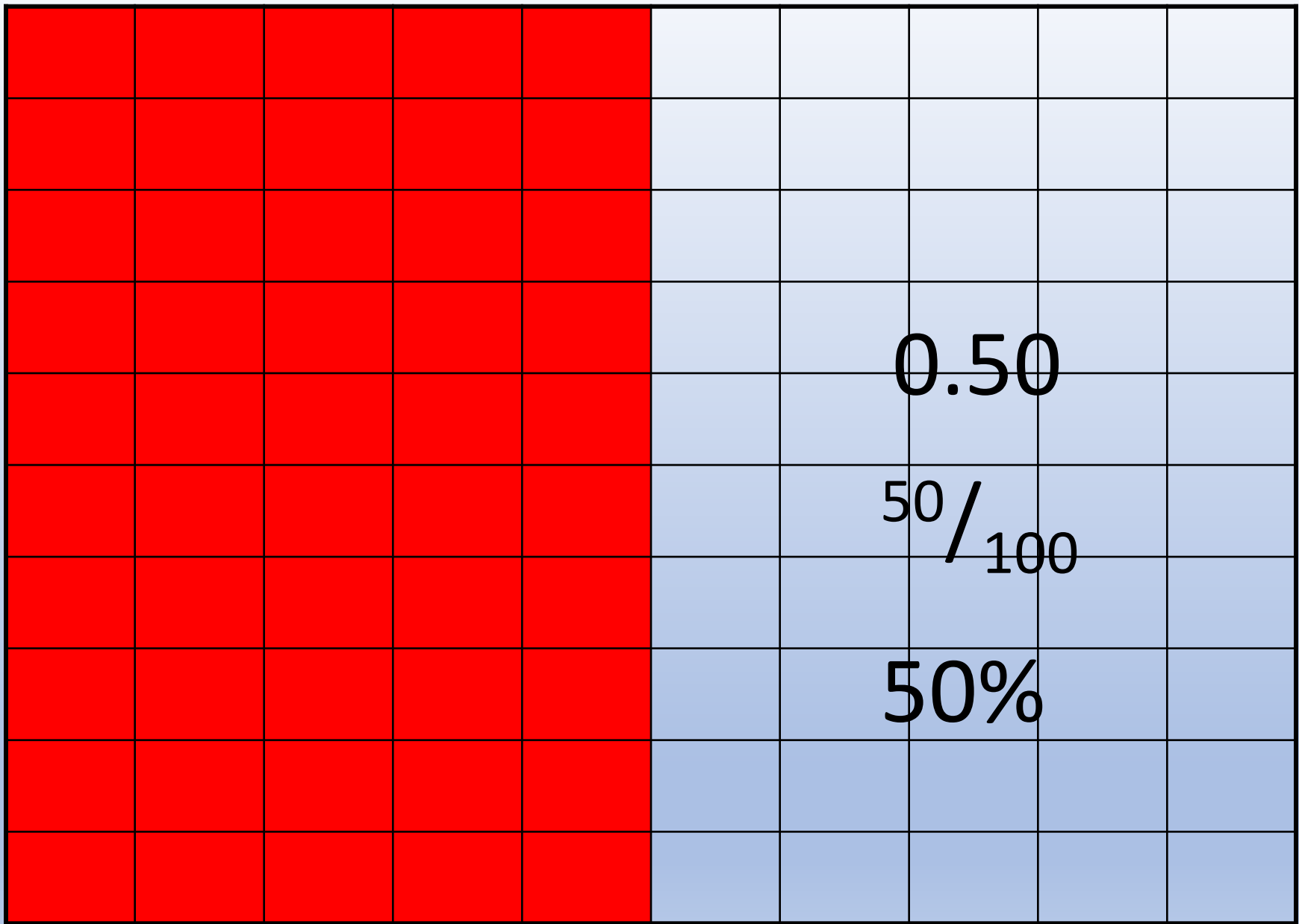
$$\frac{4}{5}$$

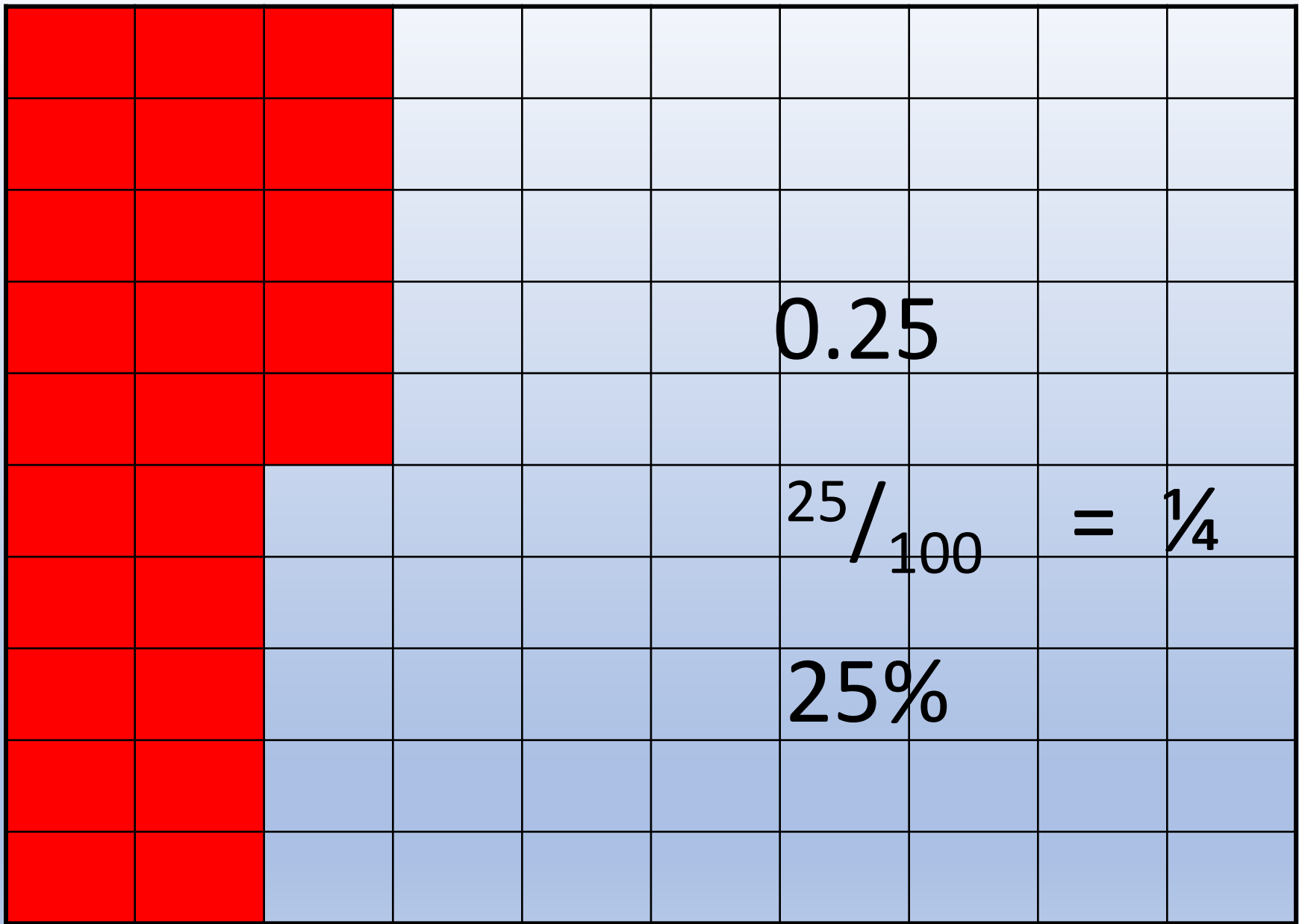
$$\frac{16}{20}$$

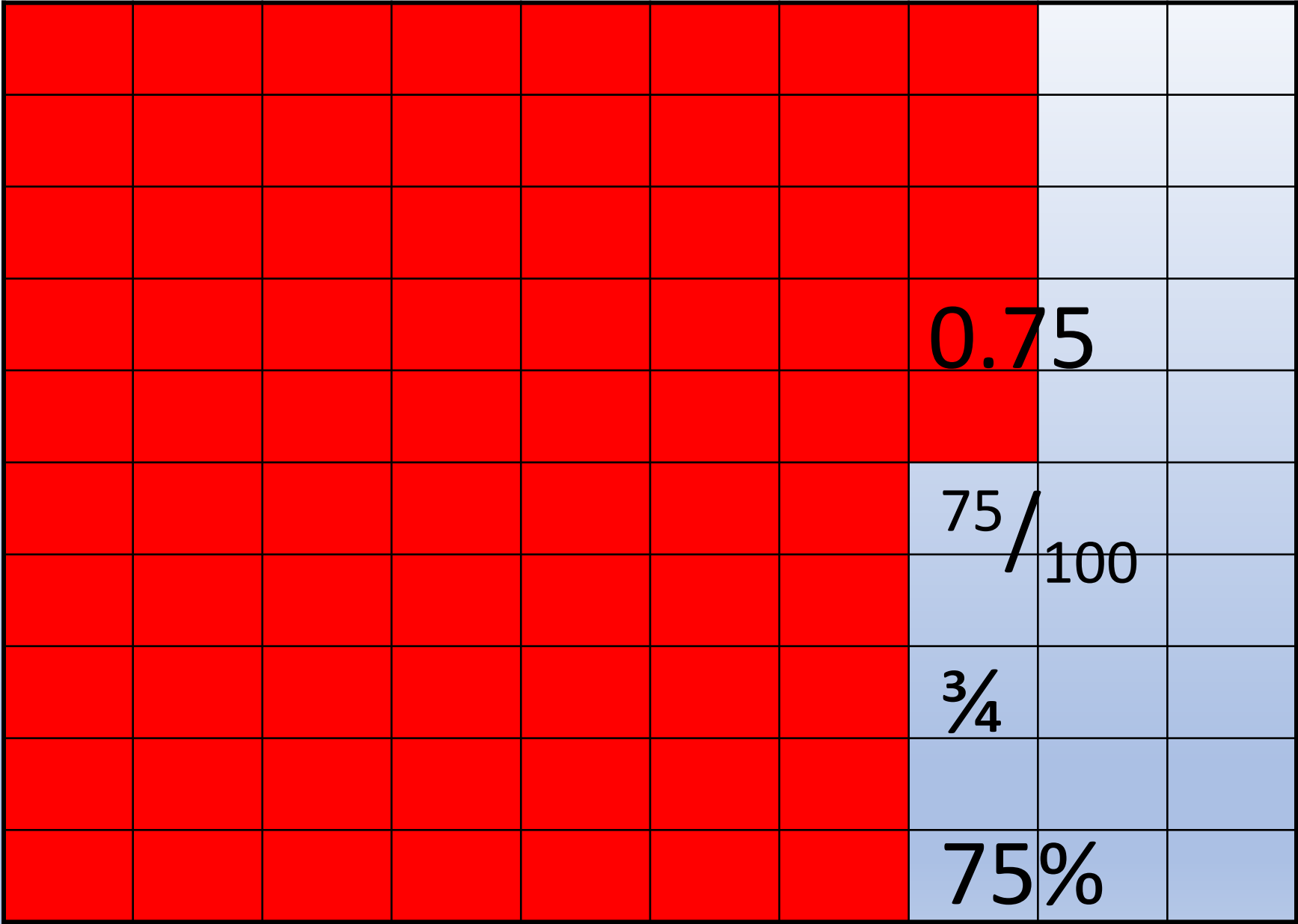
$$\frac{80}{100}$$

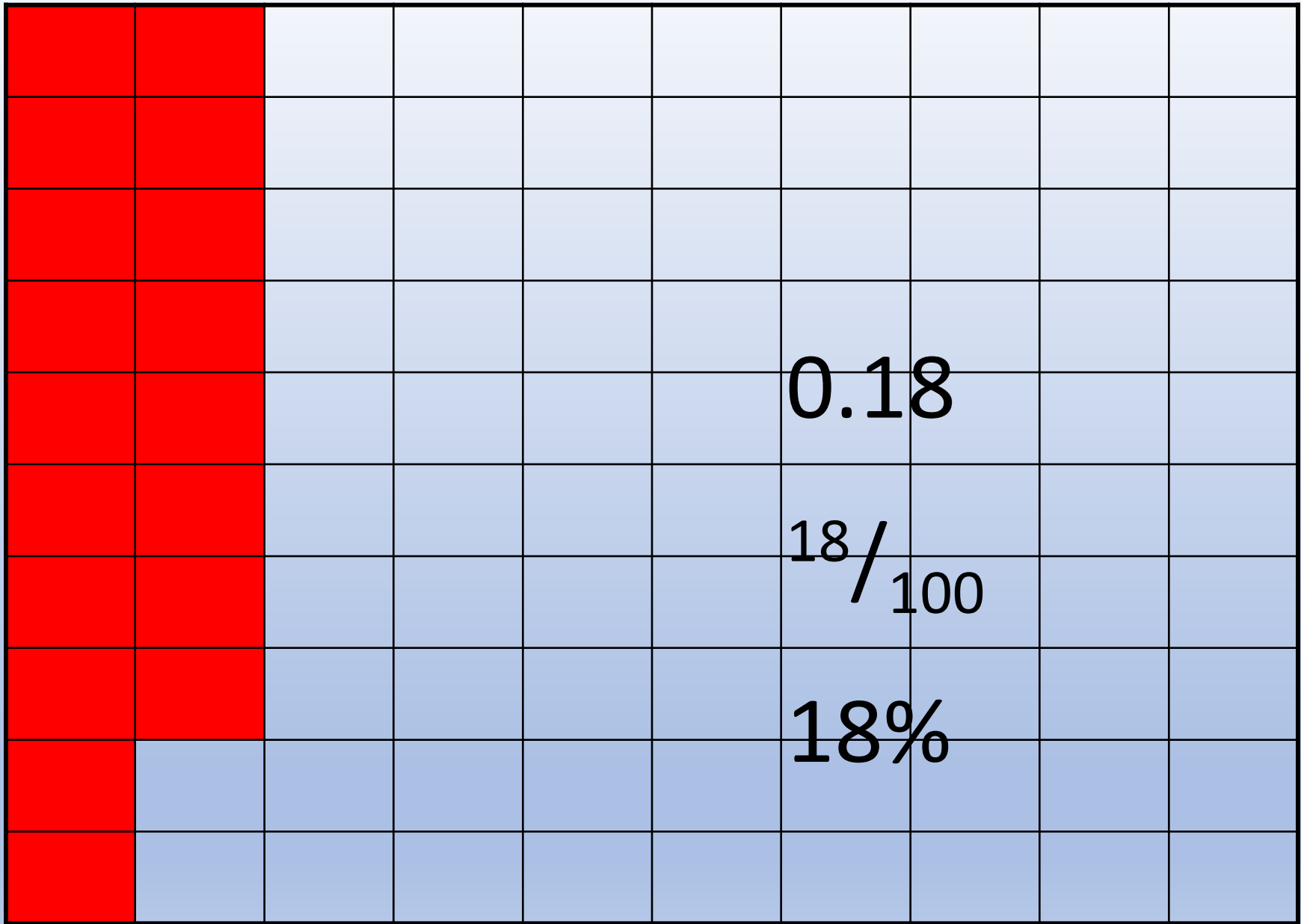
Fractions, decimals and percentages are just three ways of saying the same thing.

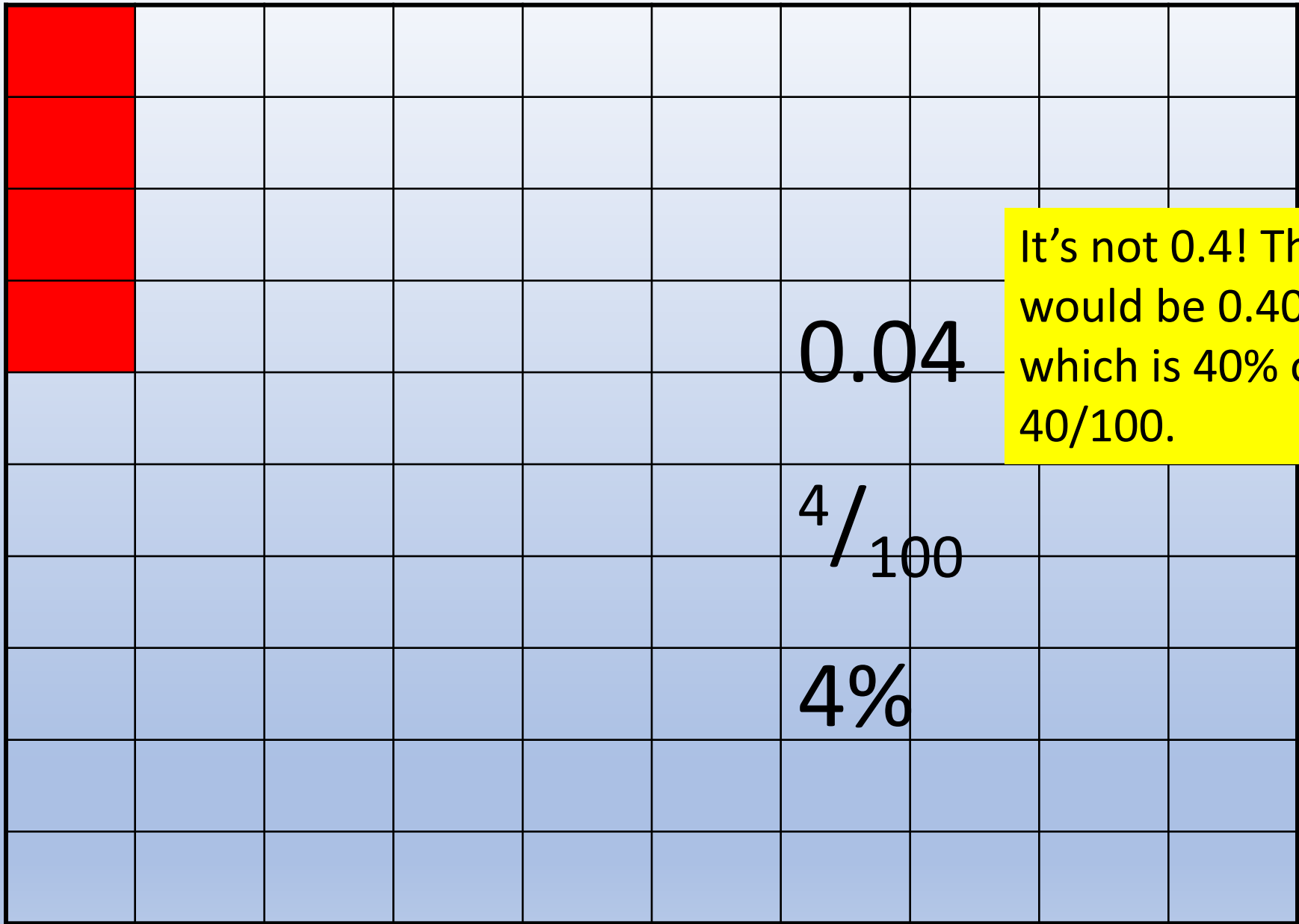










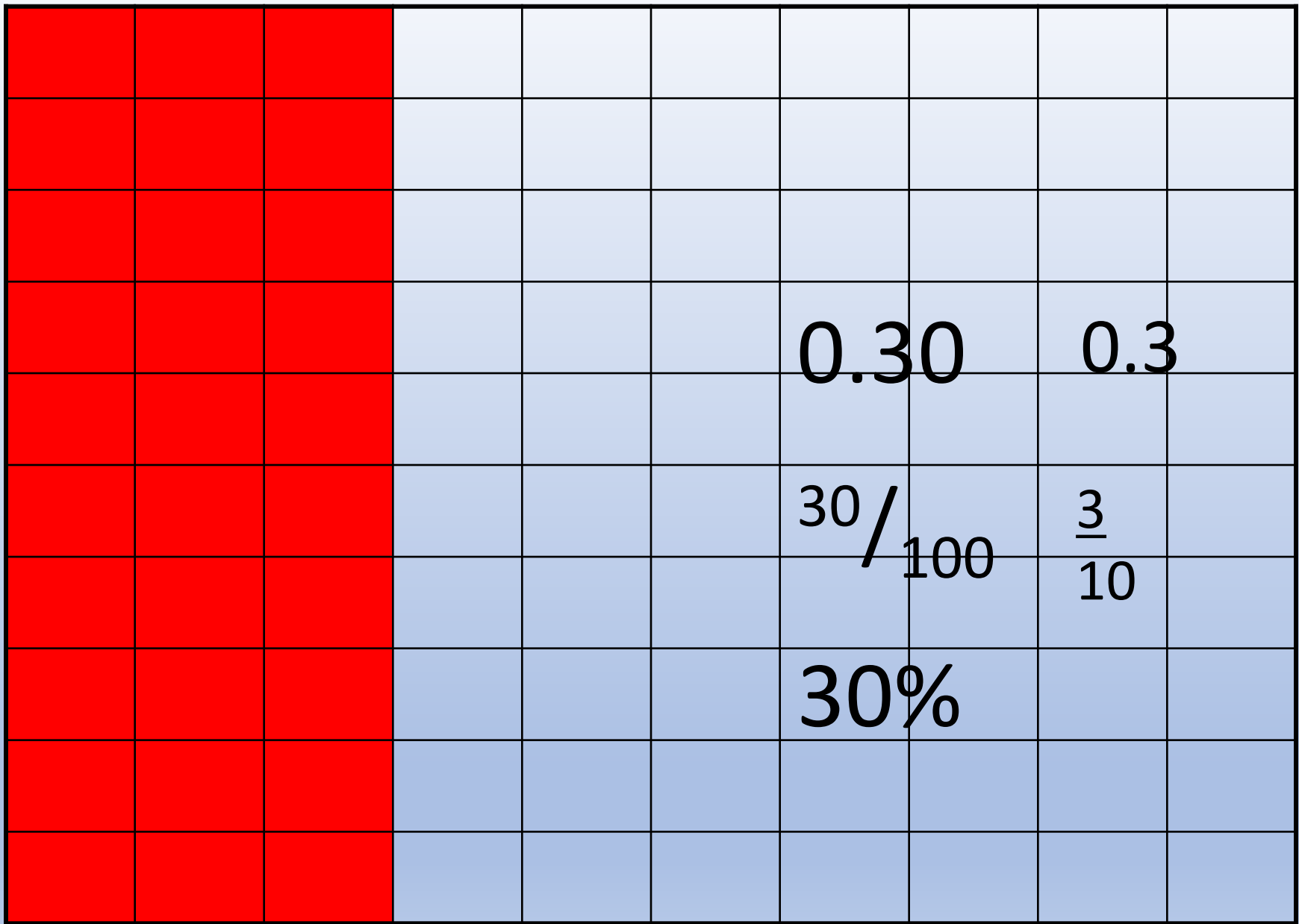


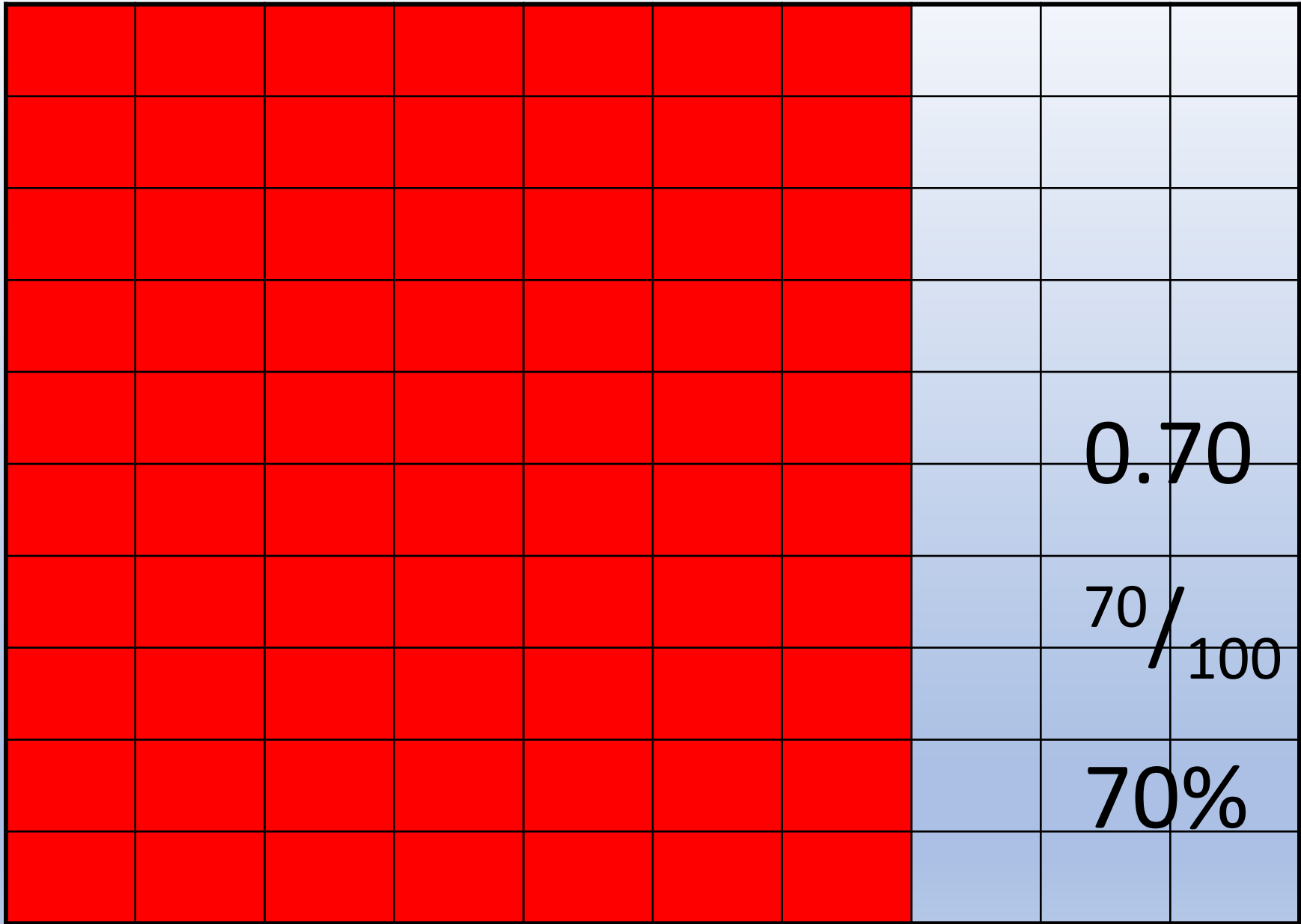
0.04

$\frac{4}{100}$

4%

It's not 0.4! That would be 0.40 which is 40% or 40/100.





0.7

$\frac{7}{10}$

0.70

$\frac{70}{100}$

70%

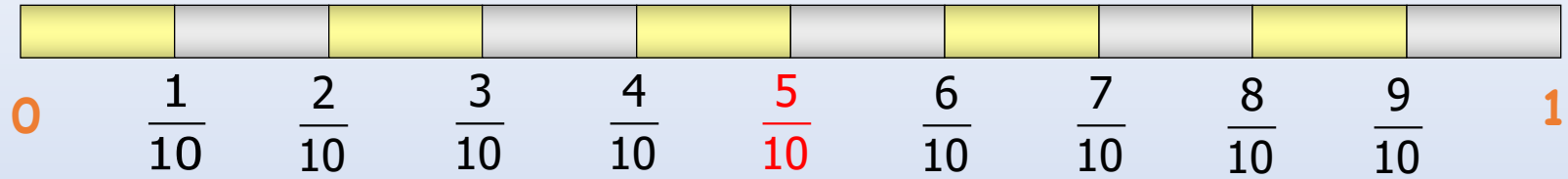
Decimal = 1.0

Fraction = $\frac{100}{100} = 1$

Percentage 100%

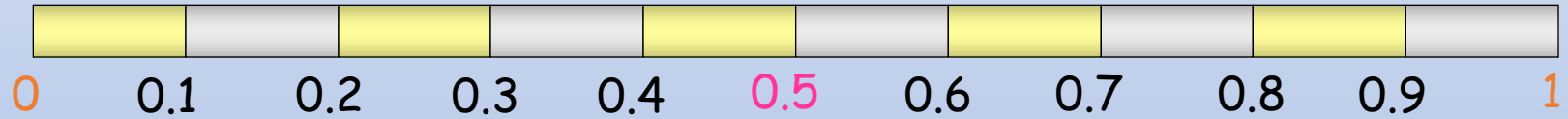
Fractions, Decimals and Percentages

Fraction



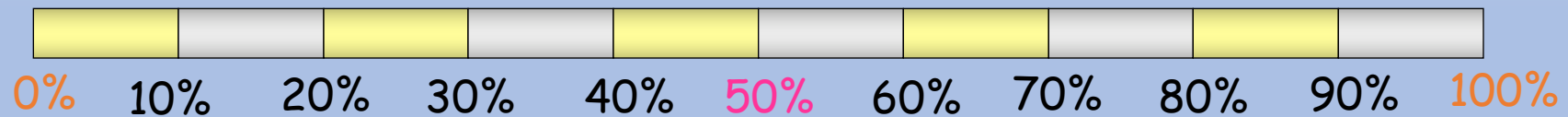
$\frac{1}{2}$

Decimal



$\frac{1}{2}$

Percentage



Just different ways of saying the same thing.

PERCENTAGES FRACTIONS

**Remember a
percentage is
ALWAYS out of
100.**

$$40\% = \frac{40}{100} \quad \xrightarrow{\div 10} \quad \frac{4}{10}$$

PERCENTAGES FRACTIONS

**Write percentage
over 100, then
simplify**

$$90\% = \frac{90}{100} \quad \xrightarrow{\div 10} \quad \frac{9}{10}$$

PERCENTAGES FRACTIONS

**Write percentage
over 100, then
simplify**

$$35\% = \frac{35}{100} \quad \xrightarrow{\div 5} \quad \frac{7}{20}$$

FRACTIONS PERCENTAGES

EXAMPLES:

$$\frac{12}{100} = 12\%$$

$$\frac{2}{50} \xrightarrow{\times 2} \frac{4}{100} = 4\%$$

Make the denominator 100. Whatever you multiply the denominator by to make 100, you need to multiply the numerator by the same number

FRACTIONS PERCENTAGES

EXAMPLES:

$$\frac{6}{20} \xrightarrow{\times 5} \frac{30}{100} = 30\%$$

Make the denominator 100. Whatever you multiply the denominator by to make 100, you need to multiply the numerator by the same number

FRACTIONS PERCENTAGES

EXAMPLES:

a) $13/100 = 13\%$

b) $35/100 = 35\%$

c) $7/50 = 14\%$

d) $9/10 = 90\%$

Make the denominator 100. Whatever you multiply the denominator by to make 100, you need to multiply the numerator by the same number

DECIMALS



FRACTIONS

Starting from the decimal point, count the decimal places. If there is one decimal place, put the number over 10 and reduce. If there are two places, put the number over 100 and reduce...

EXAMPLES:

$$\text{a) } 0.15 = \frac{15}{100} \xrightarrow{\div 5} \frac{3}{20}$$

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
				1	5	

DECIMALS



FRACTIONS

Starting from the decimal point, count the decimal places. If there is one decimal place, put the number over 10 and reduce. If there are two places, put the number over 100 and reduce...

EXAMPLES:

$$\text{a) } 0.20 = \frac{20}{100} \xrightarrow{\div 10} \frac{2}{10} \xrightarrow{\div 2} \frac{1}{5}$$

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
				2	0	

DECIMALS FRACTIONS

Starting from the decimal point, count the decimal places. If there is one decimal place, put the number over 10 and reduce. If there are two places, put the number over 100 and reduce...

EXAMPLES:

$$\text{a) } 0.08 = \frac{8}{100} \xrightarrow{\div 4} \frac{2}{25}$$

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
				0	8	

DECIMALS FRACTIONS

Starting from the decimal point, count the decimal places. If there is one decimal place, put the number over 10 and reduce. If there are two places, put the number over 100 and reduce...

EXAMPLES:

$$\text{a) } 0.8 = \frac{8}{10} \xrightarrow{\div 2} \frac{4}{5}$$

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
				8		

DECIMALS PERCENTAGES

EXAMPLES:

a) $0.23 = 23\%$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	2	3

DECIMALS PERCENTAGES

EXAMPLES:

a) $0.2 = 20\%$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	2	0

DECIMALS PERCENTAGES

EXAMPLES:

a) $0.06 = 6\%$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	0	6

PERCENTAGES DECIMALS

$$39\% = 0.39$$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	3	9

PERCENTAGES → DECIMALS

$$3\% = 0.03$$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	0	3

PERCENTAGES → DECIMALS

$$99\% = 0.99$$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	9	9

PERCENTAGES → DECIMALS

$$10\% = 0.1$$

Thousands	Hundreds	Tens	Units	Tenths	Hundredths
			0	1	0

What's bigger?

25%

or

18

50



25
100



36
100

What's bigger?

60%

or

40

50



60
100



80
100

What's bigger?

0.63

or

60%



63%

What's bigger?

0.85

or

50%



85%

What's bigger?

0.1
↓
10%

or

5
50
↓
10
100
↓
10%

What's bigger?

0.7
↙
70%

or

30
50
↙
60
100 → 60%