

Ισοδύναμα κλάσματα

1. Εφαρμόσε τα «σταυρωτά γινόμενα», για να ελέγξεις αν τα παρακάτω κλάσματα είναι ισοδύναμα, όπως στο παράδειγμα.

$$\frac{1}{2} \quad \frac{2}{4}$$

Diagram showing the cross-multiplication of $\frac{1}{2}$ and $\frac{2}{4}$. Arrows cross from 1 to 4 and from 2 to 2. The result 4 is circled on the right.

Είναι ισοδύναμα.

$$\frac{2}{3} \quad \frac{5}{9}$$

Diagram showing the cross-multiplication of $\frac{2}{3}$ and $\frac{5}{9}$. Arrows cross from 2 to 9 and from 3 to 5. The result 15 is circled on the right.

Δεν είναι ισοδύναμα.

$$\frac{1}{2} \quad \frac{5}{10}$$

Diagram showing the cross-multiplication of $\frac{1}{2}$ and $\frac{5}{10}$. Arrows cross from 1 to 10 and from 2 to 5. Empty circles are on both sides.

$$\frac{2}{5} \quad \frac{6}{15}$$

Diagram showing the cross-multiplication of $\frac{2}{5}$ and $\frac{6}{15}$. Arrows cross from 2 to 15 and from 5 to 6. Empty circles are on both sides.

$$\frac{1}{3} \quad \frac{9}{12}$$

Diagram showing the cross-multiplication of $\frac{1}{3}$ and $\frac{9}{12}$. Arrows cross from 1 to 12 and from 3 to 9. Empty circles are on both sides.

$$\frac{2}{5} \quad \frac{4}{10}$$

Diagram showing the cross-multiplication of $\frac{2}{5}$ and $\frac{4}{10}$. Arrows cross from 2 to 10 and from 5 to 4. Empty circles are on both sides.

$$\frac{2}{3} \quad \frac{4}{9}$$

Diagram showing the cross-multiplication of $\frac{2}{3}$ and $\frac{4}{9}$. Arrows cross from 2 to 9 and from 3 to 4. Empty circles are on both sides.

$$\frac{3}{4} \quad \frac{6}{8}$$

Diagram showing the cross-multiplication of $\frac{3}{4}$ and $\frac{6}{8}$. Arrows cross from 3 to 8 and from 4 to 6. Empty circles are on both sides.

2. Κάνε **πολλαπλασιασμό** και σχημάτισε ισοδύναμα κλάσματα. Συμπλήρωσε τους όρους που λείπουν, όπως στο παράδειγμα.

$$\frac{1}{6} = \frac{2}{12}$$

Diagram showing the multiplication of the numerator and denominator by 2 to create an equivalent fraction. Red arrows indicate the operation: $1 \times 2 = 2$ and $6 \times 2 = 12$.

$$\frac{4}{5} = \frac{\quad}{10}$$

Diagram showing the multiplication of the denominator by 2 to find the missing numerator. Red arrows indicate the operation: $4 \times 2 = 8$ and $5 \times 2 = 10$.

$$\frac{1}{3} = \frac{\quad}{9}$$

Diagram showing the multiplication of the denominator by 3 to find the missing numerator. Red arrows indicate the operation: $1 \times 3 = 3$ and $3 \times 3 = 9$.

$$\frac{2}{4} = \frac{\quad}{12}$$

Diagram showing the multiplication of the denominator by 3 to find the missing numerator. Red arrows indicate the operation: $2 \times 3 = 6$ and $4 \times 3 = 12$.

$$\frac{3}{7} = \frac{\quad}{21}$$

Diagram showing the multiplication of the denominator by 3 to find the missing numerator. Red arrows indicate the operation: $3 \times 3 = 9$ and $7 \times 3 = 21$.

$$\frac{6}{8} = \frac{\quad}{16}$$

Diagram showing the multiplication of the denominator by 2 to find the missing numerator. Red arrows indicate the operation: $6 \times 2 = 12$ and $8 \times 2 = 16$.

$$\frac{5}{6} = \frac{\quad}{24}$$

Diagram showing the multiplication of the denominator by 4 to find the missing numerator. Red arrows indicate the operation: $5 \times 4 = 20$ and $6 \times 4 = 24$.

$$\frac{2}{3} = \frac{\quad}{33}$$

Diagram showing the multiplication of the denominator by 11 to find the missing numerator. Red arrows indicate the operation: $2 \times 11 = 22$ and $3 \times 11 = 33$.

$$\frac{3}{4} = \frac{\quad}{36}$$

Diagram showing the multiplication of the denominator by 9 to find the missing numerator. Red arrows indicate the operation: $3 \times 9 = 27$ and $4 \times 9 = 36$.

3. Κάνε **διαίρεση** και σχημάτισε ισοδύναμα κλάσματα. Συμπλήρωσε τους όρους που λείπουν, όπως στο παράδειγμα.

$$\frac{4}{8} = \frac{2}{4}$$

Diagram showing the division of the numerator and denominator by 2 to create an equivalent fraction. Red arrows indicate the operation: $4 \div 2 = 2$ and $8 \div 2 = 4$.

$$\frac{18}{27} = \frac{\quad}{9}$$

Diagram showing the division of the numerator and denominator by 3 to find the missing numerator. Red arrows indicate the operation: $18 \div 3 = 6$ and $27 \div 3 = 9$.

$$\frac{12}{32} = \frac{\quad}{8}$$

Diagram showing the division of the numerator and denominator by 4 to find the missing numerator. Red arrows indicate the operation: $12 \div 4 = 3$ and $32 \div 4 = 8$.

$$\frac{21}{35} = \frac{\quad}{5}$$

Diagram showing the division of the numerator and denominator by 7 to find the missing numerator. Red arrows indicate the operation: $21 \div 7 = 3$ and $35 \div 7 = 5$.

$$\frac{6}{24} = \frac{\quad}{4}$$

Diagram showing the division of the numerator and denominator by 6 to find the missing numerator. Red arrows indicate the operation: $6 \div 6 = 1$ and $24 \div 6 = 4$.

$$\frac{4}{10} = \frac{\quad}{5}$$

Diagram showing the division of the numerator and denominator by 2 to find the missing numerator. Red arrows indicate the operation: $4 \div 2 = 2$ and $10 \div 2 = 5$.