

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 point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. The results, 4 and 4, are circled.

Είναι ισοδύναμα.

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

Diagram showing the cross-multiplication of $\frac{2}{3}$ and $\frac{5}{9}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. The results, 18 and 15, are circled.

Δεν είναι ισοδύναμα.

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

Diagram showing the cross-multiplication of $\frac{1}{2}$ and $\frac{5}{10}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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

Diagram showing the cross-multiplication of $\frac{2}{5}$ and $\frac{6}{15}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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

Diagram showing the cross-multiplication of $\frac{1}{3}$ and $\frac{9}{12}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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

Diagram showing the cross-multiplication of $\frac{2}{5}$ and $\frac{4}{10}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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

Diagram showing the cross-multiplication of $\frac{2}{3}$ and $\frac{4}{9}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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

Diagram showing the cross-multiplication of $\frac{3}{4}$ and $\frac{6}{8}$. Arrows point from the numerator of the first fraction to the denominator of the second, and from the denominator of the first to the numerator of the second. Empty circles are provided for the results.

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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. 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 create an equivalent fraction. Red arrows indicate the operation: $4 \div 2 = 2$ and $10 \div 2 = 5$.