

Fractions: Starters

Starter 1 (1 of 3)

Questions



A



B



C



D

1. Which shapes (A, B, C, D) are divided into equal parts?

2. In shape B, what ^{ułamek}fraction is shaded?

Starter 1 (1 of 3)

Questions



A



B



C



D

1. Which shapes (A, B, C, D) are divided into equal parts? **B and**

C

ułamek

2. In shape B, what **fraction** is

shaded? $\frac{1}{4}$

Starter 1 (2 of 3)



A



B



C



D

Questions

3. Draw a rectangle divided into 5 equal parts. Shade $\frac{3}{5}$.
4. Which is larger: $\frac{2}{5}$ or $\frac{3}{5}$?

Starter 1 (2 of 3)



A



B



C



D



Q3: $\frac{3}{5}$

Questions

3. Draw a rectangle divided into 5 equal parts. Shade $\frac{3}{5}$.
4. Which is larger: $\frac{2}{5}$ or $\frac{3}{5}$? 3

Starter 1 (3 of 3)

Questions

5. Which is larger: $\frac{3}{5}$ or $\frac{3}{4}$?

ułamki

6. Order the following **fractions** from smallest to largest:

$$\frac{1}{100}, \frac{100}{1}, \frac{1}{10}, \frac{10}{1}, \frac{1}{1}$$

Starter 1 (3 of 3)

Questions

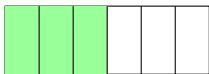
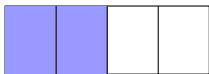
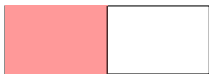
5. Which is larger: $\frac{3}{5}$ or $\frac{3}{4}$? $\frac{3}{4}$

ułamki

6. Order the following fractions from smallest to largest:

$\frac{1}{100}$, $\frac{100}{1}$, $\frac{1}{10}$, $\frac{10}{1}$, $\frac{1}{1}$ $\frac{1}{100}$, $\frac{1}{10}$, $\frac{1}{1}$, $\frac{10}{1}$, $\frac{100}{1}$

Starter 2 (1 of 3)



Questions

ułamek

1. Write the **fraction** shaded for each bar.

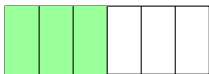
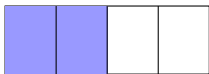
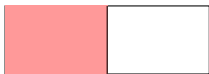
proporcjonalność

2. Is the same **proportion** of each bar shaded?

3. Use the bars to fill in the

blanks: $\frac{?}{2} = \frac{?}{4} = \frac{?}{6}$

Starter 2 (1 of 3)



Questions

ułamek

1. Write the **fraction** shaded for

each bar. $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$

proporcjonalność

2. Is the same **proportion**

of each bar shaded? **Yes**

3. Use the bars to fill in the

blanks: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$

Starter 2 (2 of 3)

Questions

4. Shade $\frac{2}{3}$ of a bar divided into 9 parts.

5. Find the missing **licznik** numerator:

$$\frac{2}{3} = \frac{?}{9}$$

Starter 2 (2 of 3)



Q4: $\frac{6}{9} = \frac{2}{3}$

Questions

4. Shade $\frac{2}{3}$ of a bar divided into 9 parts.

licznik

5. Find the missing **numerator**:

$$\frac{2}{3} = \frac{6}{9}$$

Starter 2 (3 of 3)

Questions

6. Find the missing **licznik** **numerator**: $\frac{1}{3} = \frac{?}{6}$.

7. Which two **ułamki** **fractions** are **równoważne** **equivalent** : $\frac{1}{2}, \frac{2}{5}, \frac{4}{8}, \frac{3}{6}$?

Starter 2 (3 of 3)

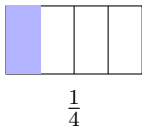
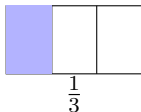
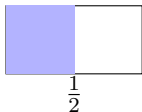
Questions

6. Find the missing **licznik** **numerator**: $\frac{1}{3} = \frac{2}{6}$.

7. Which two **ułamki** **fractions** are **równoważne** **equivalent** : $\frac{1}{2}, \frac{2}{5}, \frac{4}{8}, \frac{3}{6}$? $\frac{1}{2} = \frac{4}{8} = \frac{3}{6}$

Ułamki

Starter 3: Comparing Fractions (1 of 3)

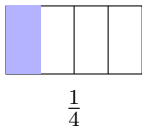
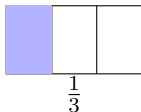
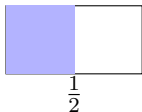


Questions

1. Which is larger: $\frac{1}{2}$ or $\frac{1}{3}$?
2. Compare $\frac{2}{5}$ and $\frac{4}{5}$. Which is bigger?

Ułamki

Starter 3: Comparing Fractions (1 of 3)



Questions

1. Which is larger: $\frac{1}{2}$ or $\frac{1}{3}$? $\frac{1}{2}$
2. Compare $\frac{2}{5}$ and $\frac{4}{5}$. Which is bigger? $\frac{4}{5}$

Ułamki

Starter 3: Comparing Fractions (2 of 3)

Questions

3. Convert $\frac{3}{4}$ and $\frac{5}{8}$ to a **wspólny mianownik** **common denominator**. Which is larger?
4. Order from smallest to largest: $\frac{1}{3}, \frac{1}{6}, \frac{1}{2}$.

Ułamki

Starter 3: Comparing Fractions (2 of 3)

Questions

3. Convert $\frac{3}{4}$ and $\frac{5}{8}$ to a **wspólny mianownik** **common denominator**. Which is larger?

$$\frac{3}{4} = \frac{6}{8}; \text{ larger: } \frac{3}{4}$$

4. Order from smallest to largest: $\frac{1}{3}, \frac{1}{6}, \frac{1}{2}, \frac{1}{6}, \frac{1}{3}, \frac{1}{2}$

Ułamki

Starter 3: Comparing Fractions (3 of 3)

Questions

5. Sam ate $\frac{2}{3}$ of a pizza, Lee ate $\frac{5}{6}$ of the same pizza. Who ate more?
6. Compare $\frac{4}{6}$ and $\frac{2}{3}$.

Ułamki

Starter 3: Comparing Fractions (3 of 3)

Questions

5. Sam ate $\frac{2}{3}$ of a pizza, Lee ate $\frac{5}{6}$ of the same pizza. Who ate more? **Lee ate more.**
6. Compare $\frac{4}{6}$ and $\frac{2}{3}$. **Equal: $\frac{4}{6} = \frac{2}{3}$**

Starter 4 (1 of 3)

Ułamki

Fractions everywhere

Questions

1. A cake is cut into 10 equal slices. If 3 are eaten, what ułamek fraction remains? ____.
2. There are 30 students. $\frac{2}{5}$ walk to school. How many walk?

Starter 4 (1 of 3)

Ułamki

Fractions everywhere

Questions

1. A cake is cut into 10 equal slices. If 3 are eaten, what ułamek fraction remains? $\frac{7}{10}$.
2. There are 30 students. $\frac{2}{5}$ walk to school. How many walk? 12 students walk

Starter 4 (2 of 3)

Ułamki
Fractions everywhere

Questions

3. A ruler is 24 cm long. Mark $\frac{1}{2}$ and $\frac{1}{3}$ on it. How many cm is each?
4. Which is longer: $\frac{3}{4}$ of an hour or $\frac{2}{3}$ of an hour? (1 hour = 60 mins)

Starter 4 (2 of 3)

Ułamki Fractions everywhere

Fractions everywhere

$$\frac{1}{2} = 12 \text{ cm}$$



Questions

- A ruler is 24 cm long. Mark $\frac{1}{2}$ and $\frac{1}{3}$ on it. How many cm is each?
- Which is longer: $\frac{3}{4}$ of an hour or $\frac{2}{3}$ of an hour? (1 hour = 60 mins) $\frac{3}{4}$ hour (45 mins) is longer

Starter 4 (3 of 3)

Ułamki

Fractions everywhere

Questions

5. You have \$30. You spend $\frac{2}{5}$ on a book. How much do you spend? How much left?
6. A recipe needs $\frac{3}{4}$ cup of milk. You only have a $\frac{1}{4}$ cup measure. How many times must you fill it?

Starter 4 (3 of 3)

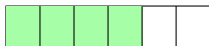
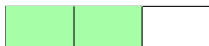
Ułamki

Fractions everywhere

Questions

5. You have \$30. You spend $\frac{2}{5}$ on a book. How much do you spend? How much left? **Spend \$12, left \$18**
6. A recipe needs $\frac{3}{4}$ cup of milk. You only have a $\frac{1}{4}$ cup measure. How many times must you fill it? **3 times**

Starter 5 (1 of 3)



1. $\frac{1}{2} = \frac{?}{6}$

ułamek

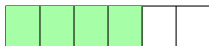
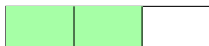
2. Write the **fraction** represented by each bar.

równoważne

(Extension) show that they are **equivalent**

3. $\frac{5}{6} = \frac{10}{?}$

Starter 5 (1 of 3)



1. $\frac{1}{2} = \frac{3}{6}$

ułamek

2. Write the **fraction** represented by each bar.

równoważne

(Extension) show that they are **equivalent**

$$\frac{2}{3}, \frac{4}{6}, \frac{6}{9}$$

3. $\frac{5}{6} = \frac{10}{12}$

Starter 5 (2 of 3)

4. Mark $1\frac{2}{3}$ and $2\frac{1}{2}$ on the number line. Convert
 $1\frac{2}{3}$ to an **ułamek niewłaściwy**
 each to an **improper fraction** .

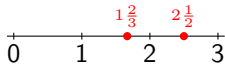


5. $\frac{2}{3} = \frac{?}{12}$

6. Which are **równoważne** to $\frac{3}{7}$: $\frac{9}{21}$, $\frac{6}{14}$, $\frac{12}{28}$, $\frac{8}{21}$?

Starter 5 (2 of 3)

4. Mark $1\frac{2}{3}$ and $2\frac{1}{2}$ on the number line. Convert
ułamek niewłaściwy
each to an improper fraction . $1\frac{2}{3} = \frac{5}{3}$;



- $2\frac{1}{2} = \frac{5}{2}$
5. $\frac{2}{3} = \frac{8}{12}$
- równoważne
6. Which are equivalent to $\frac{3}{7}$: $\frac{9}{21}, \frac{6}{14}, \frac{12}{28}, \frac{8}{21}$?

$$\frac{9}{21}, \frac{6}{14}, \frac{12}{28}$$

Starter 5 (3 of 3)

ułamki równoważne

7. Write 3 fractions equivalent to $\frac{4}{9}$

ułamki

8. Compare ($<$ $>$ $=$) these fractions: $\frac{2}{5}$ $\square$ $\frac{6}{15}$

uprościć

9. Fully simplify $\frac{48}{18}$

Starter 5 (3 of 3)

ułamki równoważne

7. Write 3 fractions equivalent to $\frac{4}{9}$ $\frac{8}{18}$, $\frac{12}{27}$, $\frac{16}{36}$

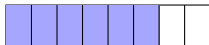
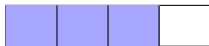
ułamki

8. Compare ($<$ $>$ $=$) these fractions: $\frac{2}{5}$ $\square$ $\frac{6}{15}$ $=$

uprościć

9. Fully simplify $\frac{48}{18}$ $\frac{8}{3}$ (or $2\frac{2}{3}$)

Starter 6 (1 of 3)



1. $\frac{3}{5} = \frac{?}{20}$

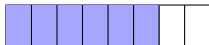
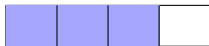
ułamek

2. Write the **fraction** shown by each bar.

(Extension) Explain why they represent the same amount.

3. $\frac{4}{7} = \frac{?}{21}$

Starter 6 (1 of 3)



1. $\frac{3}{5} = \frac{12}{20}$

ułamek

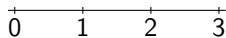
2. Write the **fraction** shown by each bar.

(Extension) Explain why they represent the same

amount. $\frac{3}{4}$, $\frac{6}{8}$, $\frac{9}{12}$

3. $\frac{4}{7} = \frac{12}{21}$

Starter 6 (2 of 3)

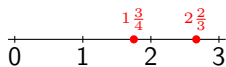


4. Mark $1\frac{3}{4}$ and $2\frac{2}{3}$ on the number line. Convert
 ułamki niewłaściwe
 both to **improper fractions** .

5. Fully **uprościć** **simplify** : $\frac{42}{56}$

6. Which are **równoważne** **equivalent** to $\frac{5}{9}$:
 $\frac{10}{18}$, $\frac{15}{27}$, $\frac{12}{20}$, $\frac{25}{45}$?

Starter 6 (2 of 3)



4. Mark $1\frac{3}{4}$ and $2\frac{2}{3}$ on the number line. Convert
ułamki niewłaściwe

both to improper fractions . $1\frac{3}{4} = \frac{7}{4}$; $2\frac{2}{3} = \frac{8}{3}$

5. Fully uprościć
simplify : $\frac{42}{56} \frac{3}{4}$

6. Which are równoważne
equivalent to $\frac{5}{9}$:

$$\frac{10}{18}, \frac{15}{27}, \frac{12}{20}, \frac{25}{45} ? \frac{10}{18}, \frac{15}{27}, \frac{25}{45}$$

Starter 6 (3 of 3)

ułamki równoważne

7. Write 3 fractions equivalent to $\frac{7}{12}$.

ułamki kolejność rosnąca

8. Order these fractions in ascending order :

$$\frac{2}{8}, \quad \frac{4}{6}, \quad \frac{5}{12}$$

9. Compare using $<$, $>$, or $=$:

$$\frac{9}{14} \square \frac{19}{28}$$

Starter 6 (3 of 3)

ułamki równoważne

7. Write 3 fractions equivalent to $\frac{7}{12}$. $\frac{14}{24}$, $\frac{21}{36}$, $\frac{28}{48}$

ułamki kolejność rosnąca

8. Order these fractions in ascending order :

$$\frac{2}{8}, \quad \frac{4}{6}, \quad \frac{5}{12}$$

$$\frac{2}{8}, \quad \frac{5}{12}, \quad \frac{4}{6}$$

9. Compare using $<$, $>$, or $=$:

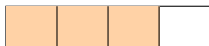
$$\frac{9}{14} \square \frac{19}{28}$$

$<$

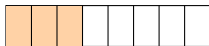
Starter 7 (1 of 3)

ułamek

1. Write the **fraction** represented by each bar.



$$\frac{3}{4}, \quad \frac{3}{5}, \quad \frac{3}{8}$$



ułamki

3. (Extension) explain why **fractions** with the same **licznik** **mianownik** **numerator** change size when the **denominator**

changes.

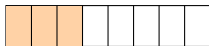
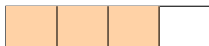
Starter 7 (1 of 3)

ułamek

1. Write the **fraction** represented by each bar.

$$\frac{3}{4}, \frac{3}{5}, \frac{3}{8}$$

2. Which is largest:



$$\frac{3}{4}, \frac{3}{5}, \frac{3}{8}$$

$$\frac{3}{4}$$

ułamki

3. (Extension) explain why **fractions** with the same **licznik** **mianownik** **numerator** change size when the **denominator**

changes. The larger the denominator, the smaller

Starter 7 (2 of 3)

4. Compare using $<$, $>$ or $=$:

$$\frac{5}{6} \square \frac{5}{9}$$

5. Fully uprościć simplify : $\frac{18}{24}$

6. Fully uprościć simplify : $\frac{27}{36}$

Starter 7 (2 of 3)

4. Compare using $<$, $>$ or $=$:

$$\frac{5}{6} \square \frac{5}{9}$$

$>$

uprościć

5. Fully simplify : $\frac{18}{24} \frac{3}{4}$

uprościć

6. Fully simplify : $\frac{27}{36} \frac{3}{4}$

Starter 7 (3 of 3)

liczby mieszane

7. Write these as **mixed numbers** :

$$\frac{11}{4}, \quad \frac{9}{2}$$

ułamki niewłaściwe

8. Convert to **improper fractions** :

$$2\frac{3}{5}, \quad 1\frac{7}{8}$$

9. Which is bigger:

$$\frac{7}{10} \square \frac{7}{12}$$

Starter 7 (3 of 3)

liczby mieszane

7. Write these as **mixed numbers** :

$$\frac{11}{4}, \quad \frac{9}{2}$$

$$2\frac{3}{4}, \quad 4\frac{1}{2}$$

ułamki niewłaściwe

8. Convert to **improper fractions** :

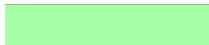
$$2\frac{3}{5}, \quad 1\frac{7}{8}$$

$$\frac{13}{5}, \quad \frac{15}{8}$$

9. Which is bigger:

$$\frac{7}{10} \square \frac{7}{12}$$

Starter 8 (1 of 3)

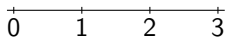


ułamek niewłaściwy

1. Write the **improper fraction** shown by the diagram.

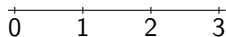
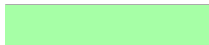
liczba mieszana

2. Write the **mixed number** represented by the green bars in the diagram.



3. Mark $1\frac{1}{4}$ and $2\frac{3}{4}$ on the number line.

Starter 8 (1 of 3)



ułamek niewłaściwy

1. Write the **improper fraction** shown by the diagram. $\frac{5}{4}$

liczba mieszana

2. Write the **mixed number** represented by the green bars in the diagram. $1\frac{1}{4}$

3. Mark $1\frac{1}{4}$ and $2\frac{3}{4}$ on the number line. At $1\frac{1}{4}$ and $2\frac{3}{4}$

Starter 8 (2 of 3)

liczba mieszana

4. Convert: $\frac{13}{5}$ to a mixed number .

5. Convert:

$$3\frac{2}{3}$$

ułamek niewłaściwy

to an improper fraction .

uproszczyć

6. Fully simplify :

$$\frac{16}{40}$$

Starter 8 (2 of 3)

liczba mieszana

4. Convert: $\frac{13}{5}$ to a mixed number . $2\frac{3}{5}$

5. Convert:

$$3\frac{2}{3}$$

ułamek niewłaściwy

to an improper fraction . $\frac{11}{3}$

uproszczyć

6. Fully simplify :

$$\frac{16}{40}$$

$$\frac{2}{5}$$

Starter 8 (3 of 3)

7. Which is greater:

$$\frac{4}{9} \square \frac{4}{11}$$

8. Order from smallest to largest:

$$\frac{6}{5}, \quad 1\frac{1}{2}, \quad \frac{7}{4}$$

Starter 8 (3 of 3)

7. Which is greater:

$$\frac{4}{9} \square \frac{4}{11}$$

$$\frac{4}{9}$$

8. Order from smallest to largest:

$$\frac{6}{5}, \quad 1\frac{1}{2}, \quad \frac{7}{4}$$

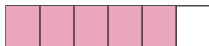
$$\frac{6}{5}, \quad 1\frac{1}{2}, \quad \frac{7}{4}$$

Starter 9 (1 of 3)

ułamki

1. Write the **fractions** shown by the bars.
2. Which is larger:

$$\frac{5}{6} \square \frac{5}{8}$$



ułamki równoważne

3. Write 3 **fractions equivalent** to:

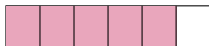
$$\frac{2}{5}$$

Starter 9 (1 of 3)

ułamki

1. Write the **fractions** shown by the bars. $\frac{5}{6}$ and $\frac{5}{8}$
2. Which is larger:

$$\frac{5}{6} \square \frac{5}{8}$$



>

ułamki równoważne

3. Write 3 **fractions equivalent** to:

$$\frac{2}{5}$$

$$\frac{4}{10}, \frac{6}{15}, \frac{8}{20}$$

Starter 9 (2 of 3)

uprościć

4. Fully simplify :

$$\frac{54}{72}$$

liczby mieszane

5. Convert to mixed numbers :

$$\frac{17}{6}, \quad \frac{22}{9}$$

ułamki niewłaściwe

6. Convert to improper fractions :

$$4\frac{1}{3}, \quad 2\frac{5}{6}$$

Starter 9 (2 of 3)

uprościć

4. Fully simplify :

$$\frac{54}{72}$$

$$\frac{3}{4}$$

liczby mieszane

5. Convert to mixed numbers :

$$\frac{17}{6}, \quad \frac{22}{9}$$

$$2\frac{5}{6}, 2\frac{4}{9}$$

ułamki niewłaściwe

6. Convert to improper fractions :

$$4\frac{1}{3}, \quad 2\frac{5}{6}$$

Starter 9 (3 of 3)

7. Order from smallest to largest:

$$\frac{123}{1234}, \quad \frac{321}{1234}, \quad \frac{111}{1234}$$

8. Challenge: Which is larger?

$$2\frac{1}{4} \square 2\frac{2}{5}$$

Starter 9 (3 of 3)

7. Order from smallest to largest:

$$\frac{123}{1234}, \quad \frac{321}{1234}, \quad \frac{111}{1234}$$

$$\frac{111}{1234}, \quad \frac{123}{1234}, \quad \frac{321}{1234}$$

8. Challenge: Which is larger?

$$2\frac{1}{4} \square 2\frac{2}{5}$$

$$2\frac{2}{5}$$