

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 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

2. In shape B, what **fraction** is shaded? $\frac{1}{4}$

Starter 1 (2 of 3)

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)



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 $\frac{3}{5}$? $\frac{3}{5}$

Starter 1 (3 of 3)

Questions

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

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)

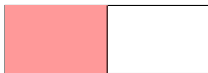
Questions

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

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

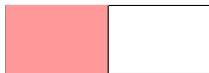
1. Write the ^{كسر}fraction shaded for each bar.

2. Is the same ^{تناسب}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

1. Write the **fraction** shaded for

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

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.

صورت

5. Find the missing **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.

صورت

5. Find the missing **numerator**:

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

Starter 2 (3 of 3)

Questions

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

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

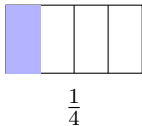
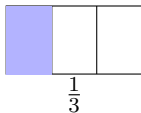
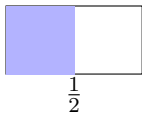
Starter 2 (3 of 3)

Questions

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

7. Which two ^{کسر} fractions are ^{مساوی} equivalent: $\frac{1}{2}, \frac{2}{5}, \frac{4}{8}, \frac{3}{6}$? $\frac{1}{2} = \frac{4}{8} = \frac{3}{6}$

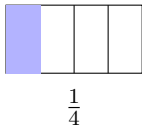
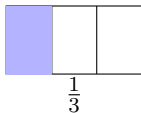
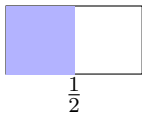
Starter 3 (1 of 3): Comparing Fractions



Questions

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

Starter 3 (1 of 3): Comparing Fractions



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? $\frac{4}{5}$

Starter 3 (2 of 3): Comparing ^{كسر}Fractions

Questions

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

Starter 3 (2 of 3): Comparing Fractions

Questions

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

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

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

Starter 3 (3 of 3): Comparing Fractions

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 $\frac{2}{3}$.

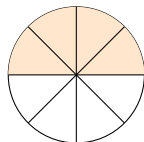
Starter 3 (3 of 3): Comparing Fractions

Questions

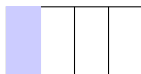
5. Sam ate $\frac{2}{3}$ of a pizza, Lee ate $\frac{5}{6}$ of the same pizza. Who ate more? **Lee ate more.**
6. Compare $\frac{4}{6}$ and $\frac{2}{3}$. **Equal: $\frac{4}{6} = \frac{2}{3}$**

Starter 4 (1 of 3)

Fractions everywhere



Pizza



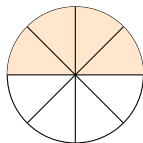
Chocolate

Questions

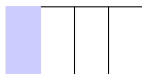
1. A cake is cut into 10 equal slices. If 3 are eaten, what **fraction** remains? ____.
2. There are 30 students. $\frac{2}{5}$ walk to school. How many walk?

Starter 4 (1 of 3)

 **Fractions** everywhere



Pizza



Chocolate

Questions

1. A cake is cut into 10 equal slices. If 3 are eaten, what

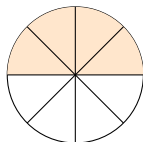
 **fraction** remains? $\frac{7}{10}$.

2. There are 30 students. $\frac{2}{5}$ walk to school. How many walk? **12**

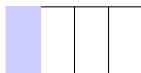
students walk

Starter 4 (2 of 3)

 **Fractions** everywhere



Pizza



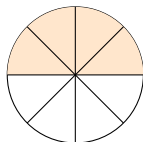
Chocolate

Questions

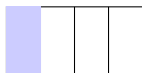
3. A ruler is 24 cm long. Mark $\frac{1}{2}$ and $\frac{1}{3}$ on it. How many cm is each?
4. Which is longer: $\frac{3}{4}$ of an hour or $\frac{2}{3}$ of an hour? (1 hour = 60 mins)

Starter 4 (2 of 3)

 **Fractions** everywhere



Pizza



Chocolate

$$\frac{1}{3} = 8 \text{ cm}$$

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



0

24 cm

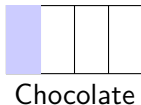
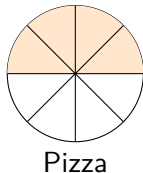
Questions

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) $\frac{3}{4}$ hour (45 mins) is longer

Starter 4 (3 of 3)

Questions

 **Fractions** everywhere



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.

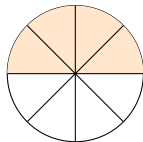
You only have a $\frac{1}{4}$ cup measure.

How many times must you fill

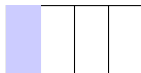
Starter 4 (3 of 3)

Questions

 **Fractions** everywhere



Pizza



Chocolate

5. You have \$30. You spend $\frac{2}{5}$ on a book. How much do you spend? How much left? **Spend**

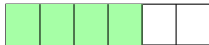
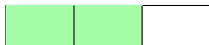
\$12, left \$18

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

Starter 5 (1 of 3)



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

2. Write the *fraction*

represented by each

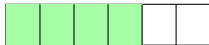
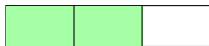
bar. (Extension)

show that they are

مساوی
equivalent

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

Starter 5 (1 of 3)



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

2. Write the *fraction*

represented by each

bar. (Extension)

show that they are

مساوی
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 each to an

غیر مناسب کسر
improper fraction.

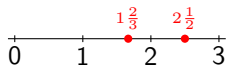
5. $\frac{2}{3} = \frac{?}{12}$

6. Which are مساوی equivalent

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 each to an

غير مناسب کسر
improper fraction.

$$1\frac{2}{3} = \frac{5}{3}; 2\frac{1}{2} = \frac{5}{2}$$

5. $\frac{2}{3} = \frac{8}{12}$

6. Which are ^{مساوی}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)

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

8. Compare ($<$ $>$ $=$) these

^{کسر} fractions: $\frac{2}{5} \square \frac{6}{15}$

9. Fully ^{سادہ کرنا} simplify $\frac{48}{18}$

Starter 5 (3 of 3)

7. Write 3 ^{کسر} ^{مساوی} fractions equivalent

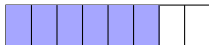
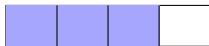
to $\frac{4}{9}$ $\frac{8}{18}$, $\frac{12}{27}$, $\frac{16}{36}$

8. Compare ($<$ $>$ $=$) these

^{کسر} fractions: $\frac{2}{5} \square \frac{6}{15} =$

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

Starter 6 (1 of 3)



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

2. Write the **fraction**

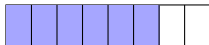
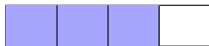
shown by each bar.

(Extension) Explain

why they represent
the same amount.

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

Starter 6 (1 of 3)



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

2. Write the **fraction**

shown by each bar.

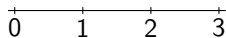
(Extension) Explain

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 both to
غیر مناسب کسر
improper fractions.

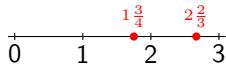
5. Fully **simplify**: $\frac{42}{56}$
سادہ کرنا

6. Which are **equivalent**
مساوی

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 both to
غیر مناسب کسر
improper fractions.

$$1\frac{3}{4} = \frac{7}{4}; 2\frac{2}{3} = \frac{8}{3}$$

5. Fully **simplify**: $\frac{42}{56}$ **سادہ کرنا** $\frac{3}{4}$

6. Which are **equivalent** **مساوی**

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)

7. Write 3 ^{كسور} fractions equivalent

to $\frac{7}{12}$.

8. Order these ^{كسور} fractions in
^{صعودی ترتیب} ascending order:

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

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

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

Starter 6 (3 of 3)

7. Write 3 ^{کسر} ^{مساوی} fractions equivalent

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

8. Order these ^{کسر} ^{صعودی ترتیب} fractions in ascending order:

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

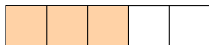
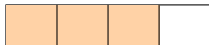
$$\frac{2}{8}, \frac{5}{12}, \frac{4}{6}$$

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

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

$<$

Starter 7 (1 of 3)



1. Write the **fraction** ^{كسر} represented by each bar.

2. Which is largest:

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

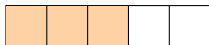
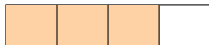
3. (Extension) explain

why **fractions** ^{كسر} with the same **numerator** ^{صورت}

change size when the **denominator** ^{مخرج}

changes.

Starter 7 (1 of 3)



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

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

2. Which is largest:

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

$\frac{3}{4}$

3. (Extension) explain

why **fractions** with the same **numerator**

change size when the **denominator**

changes. **The larger the denominator, the smaller each equal**

part is.

Starter 7 (2 of 3)

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

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

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

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

Starter 7 (2 of 3)

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

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

$>$

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

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

Starter 7 (3 of 3)

7. Write these as

مخلوط عدد

mixed numbers:

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

9. Which is bigger:

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

غير مناسب كسر

8. Convert to improper fractions:

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

Starter 7 (3 of 3)

7. Write these as

مخلوط عدد

mixed numbers:

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

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

غير مناسب كسر

8. Convert to improper fractions:

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

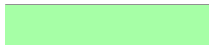
$$\frac{13}{5}, \quad \frac{15}{8}$$

9. Which is bigger:

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

$$\frac{7}{10}$$

Starter 8 (1 of 3)



1. Write the
غیر مناسب کسر
improper fraction

shown by the

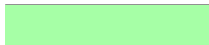
diagram.

2. Write the
مخلوط عدد
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)



1. Write the
غیر مناسب کسر
improper fraction

shown by the

diagram. $\frac{5}{4}$

2. Write the
مخلوط عدد
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)

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

5. Convert:

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

غير مناسب كسر
to an improper fraction.

- سادہ کرنا
6. Fully simplify:

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

Starter 8 (2 of 3)

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

5. Convert:

$3\frac{2}{3}$
غیر مناسب کسر
to an improper fraction. $\frac{11}{3}$

- سادہ کرنا
6. Fully simplify:

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

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

Starter 8 (3 of 3)

7. Which is greater:

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

largest:

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

8. Order from smallest to

Starter 8 (3 of 3)

7. Which is greater:

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

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

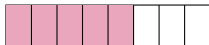
largest:

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

8. Order from smallest to

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

Starter 9 (1 of 3)



1. Write the **fractions** shown by the bars.

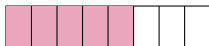
2. Which is larger:

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

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

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

Starter 9 (1 of 3)



1. Write the **fractions**

shown by the bars.

$$\frac{5}{6} \text{ and } \frac{5}{8}$$

2. Which is larger:

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

>

3. Write 3 **fractions**

مساوی
equivalent to:

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

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

Starter 9 (2 of 3)

سادہ کرنا

4. Fully **simplify**:

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

مخلوط عدد

5. Convert to **mixed numbers**:

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

غیر مناسب کسر

6. Convert to **improper fractions**:

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

Starter 9 (2 of 3)

سادہ کرنا

4. Fully simplify:

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

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

مخلوط عدد

5. Convert to mixed numbers:

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

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

غیر مناسب کسر

6. Convert to improper fractions:

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

$$\frac{13}{3}, \quad \frac{17}{6}$$

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?

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

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