

GCSE Maths: Ordering and comparing fractions (Foundation): answers

GCSE Maths - Fractions - Foundation - Lesson 3.3

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch03-fractions/foundation/ordering-and-comparing-fractions/

Exercise 3C Ordering and comparing fractions Non-calculator

1 Copy each pair and write < or > between them.

(a) $\frac{1}{3} \text{ — } \frac{1}{5}$

Answer: >

(b) $\frac{3}{8} \text{ — } \frac{5}{8}$

Answer: <

(c) $\frac{2}{3} \text{ — } \frac{3}{4}$

Answer: <

(d) $\frac{5}{6} \text{ — } \frac{7}{9}$

Answer: >

(e) $\frac{4}{5} \text{ — } \frac{7}{10}$

Answer: >

(f) $\frac{3}{7} \text{ — } \frac{1}{2}$

Answer: <

2 Write the larger fraction in each pair.

(a) $\frac{3}{5}$ and $\frac{7}{10}$

Answer: $\frac{7}{10}$

(b) $\frac{4}{9}$ and $\frac{1}{2}$

Answer: $\frac{1}{2}$

(c) $\frac{5}{8}$ and $\frac{2}{3}$

Answer: $\frac{2}{3}$

(d) $\frac{7}{12}$ and $\frac{3}{5}$

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

3 Write each set in order, smallest first.

(a) $\frac{1}{2}, \frac{3}{8}, \frac{1}{4}, \frac{5}{8}$

Answer: $\frac{1}{4}, \frac{3}{8}, \frac{1}{2}, \frac{5}{8}$

(b) $\frac{2}{3}, \frac{5}{6}, \frac{1}{2}, \frac{3}{4}$

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

(c) $\frac{7}{10}, \frac{3}{5}, \frac{13}{20}, \frac{1}{2}$

Answer: $\frac{1}{2}, \frac{3}{5}, \frac{13}{20}, \frac{7}{10}$

(d) $\frac{4}{5}, \frac{7}{8}, \frac{3}{4}, \frac{9}{10}$

Answer: $\frac{3}{4}, \frac{4}{5}, \frac{7}{8}, \frac{9}{10}$

4 Write a fraction that lies between $\frac{1}{2}$ and $\frac{3}{4}$.

Answer: For example $\frac{5}{8}, \frac{3}{5}$ or $\frac{2}{3}$

5 Sam ran $\frac{3}{4}$ km and Zara ran $\frac{7}{10}$ km. Who ran further?

Answer: Sam ($\frac{15}{20} > \frac{14}{20}$)

6 Jo says " $\frac{1}{8}$ is bigger than $\frac{1}{5}$ because 8 is bigger than 5." Is Jo correct? Explain.

Answer: No. The bigger the denominator, the smaller each part. $\frac{1}{5} > \frac{1}{8}$.

7 Amy eats $\frac{2}{3}$ of a pizza, Ben eats $\frac{5}{8}$ of a pizza and Cal eats $\frac{7}{12}$ of a pizza. Who ate the most? Who ate the least?

Answer: Common denominator 24: $\frac{16}{24}, \frac{15}{24}, \frac{14}{24}$. Amy ate most; Cal ate least.

8 Find the fraction with denominator 12 that lies between $\frac{1}{2}$ and $\frac{2}{3}$.

Answer: $\frac{6}{12} < \frac{7}{12} < \frac{8}{12}$, so $\frac{7}{12}$

9 **Challenge.** Write down three fractions, each between $\frac{1}{3}$ and $\frac{1}{2}$.

Answer: For example $\frac{2}{5}, \frac{3}{8}, \frac{5}{12}$