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COMPARING FRACTIONS



Comparing Fractions

Sometimes we need to compare two fractions to discover which is larger or smaller.

There are two main ways to compare fractions: using **decimals**, or using the **same denominator**.

The Decimal Method of Comparing Fractions

Convert each fraction to decimals, and then compare the decimals.

Example: Which is bigger: $\frac{3}{8}$ or $\frac{5}{12}$?

$\frac{3}{8} = 0.375$ and $\frac{5}{12} = 0.4166$

So $\frac{5}{12}$ is bigger.



Comparing Fractions

The Same denominator method

*The **denominator** is the bottom number in a fraction. It shows how many equal parts the item is divided into*

Which is bigger $\frac{4}{9}$ or $\frac{5}{9}$?

When two fractions have the **same denominator** they are easy to compare:



$\frac{4}{9}$



$\frac{5}{9}$



Question: 01

By how much does $7/(8/9)$ exceeds $(7/8)/9$?

- A. $2 \frac{5}{8}$
- B. $3 \frac{1}{9}$
- C. $7 \frac{7}{9}$
- D. $9 \frac{1}{7}$

Answer: C

Question: 02

Which of the following fraction is smallest?

- A. $\frac{23}{28}$
- B. $\frac{14}{15}$
- C. $\frac{15}{19}$
- D. $\frac{21}{24}$

Answer: C

Question: 03

$$0.363 \times 0.522 + 0.363 \times 0.478 = ?$$

- A. 0.522
- B. 0.845
- C. 0.363
- D. 0.985

Answer: C

Question: 04

The value of $\frac{34.31 \times 0.473 \times 1.567}{0.0673 \times 23.25 \times 7.57}$ is close to

- A. 2.0
- B. 1.15
- C. 2.05
- D. 2.15

Answer: D

Question: 05

If $5.51 \cdot 10^k = 0.0551$, then the value of k is:

- A. -4
- B. -3
- C. -2
- D. -1

Answer: C



Question: 06

The value of
$$\frac{(2.502+0.064)^2 - (2.502-0.064)^2}{2.502*0.064}$$

- A. 4
- B. 235
- C. 25
- D. 3

Answer: A



Question: 07

The value of
$$\frac{4.5 \times 1.8 + 4.5 \times 8.2}{1.5 \times 4.5 + 1.5 \times 5.5}$$

- A. 10
- B. 8
- C. 5
- D. 3

Answer: D

Question: 08

The value of
$$\frac{(.02)^2 + (0.52)^2 + (0.035)^2}{(0.002)^2 + (0.052)^2 + (0.0035)^2}$$

- A. 100
- B. 1000
- C. 001
- D. 0001

Answer: A



Question: 09

Compare $\frac{3}{5}$ and $\frac{4}{7}$

- A. $\frac{3}{5} > \frac{4}{7}$
- B. $\frac{3}{5} < \frac{4}{7}$
- C. $\frac{3}{5} = \frac{4}{7}$
- D. None of these

Answer: A

Question: 10



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Which of the following fraction is arranged in ascending order of their value?

- A. $1/4, 2/7, 3/4, 4/7, 5/7, 6/5$
- B. $1/4, 2/7, 4/7, 5/7, 3/4, 6/5$
- C. $2/7, 1/4, 4/7, 3/4, 5/7, 6/5$
- D. $2/7, 1/4, 4/7, 5/7, 3/4, 6/5$

Answer: B



Question: 11

Which of the following fraction is greater than $\frac{4}{5}$ and less than $\frac{6}{7}$?

- A. $\frac{2}{3}$
- B. $\frac{3}{4}$
- C. $\frac{5}{6}$
- D. $\frac{10}{11}$

Answer: C

Question: 12

The denominator of a fraction exceeds its numerator by 7. If the numerator as well as the denominator is increased by 9, the fraction becomes $\frac{2}{3}$. Which of the following is the original fraction?

- A. $\frac{5}{12}$
- B. $\frac{4}{11}$
- C. $\frac{6}{13}$
- D. none of these

Answer: A



Question: 13

The sum of the numerator and denominator of a fraction is 13. If we add 3 and 9 to numerator and denominator respectively, it becomes $\frac{2}{3}$. The fraction is:

- A. $\frac{5}{8}$
- B. $\frac{6}{7}$
- C. $\frac{7}{6}$
- D. $\frac{8}{5}$

Answer: C



Question: 14

There are two fractions such that fraction X is thrice the fraction Y and their product is $\frac{25}{12}$. Which of the following is equal to Y?

- A. $\frac{5}{6}$
- B. $\frac{4}{5}$
- C. $\frac{3}{4}$
- D. $\frac{7}{9}$

Answer: A



Question: 15

By how much is four-seventh of 560 greater than five-eighth of 400?

- A. 210
- B. 70
- C. 90
- D. 110

Answer: B

