

Name:

Exam Style Questions

Ordering Fractions



Corbettmaths

Equipment needed: Calculator, pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 144



Answers and Video Solutions



1. Write down the largest of these three fractions.



$$\begin{array}{ccc} \frac{3}{5} & \frac{11}{20} & \frac{1}{2} \\ \frac{12}{20} & \frac{11}{20} & \frac{10}{20} \end{array}$$

x4

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

.....
(2)

2. Write these fractions in order of size.
Start with the smallest number.



$$\begin{array}{cccc} \frac{7}{10} & \frac{3}{4} & \frac{1}{2} & \frac{3}{5} \\ \frac{14}{20} & \frac{15}{20} & \frac{10}{20} & \frac{12}{20} \end{array}$$

$$\frac{1}{2} \quad \frac{3}{5} \quad \frac{7}{10} \quad \frac{3}{4}$$

.....
(2)

3. Arrange these fractions in order, smallest first.



$$\begin{array}{cccc} \frac{2}{3} & \frac{7}{9} & \frac{5}{6} & \frac{11}{18} \\ \frac{12}{18} & \frac{14}{18} & \frac{15}{18} & \frac{11}{18} \end{array}$$

$$\frac{11}{18} \quad \frac{2}{3} \quad \frac{7}{9} \quad \frac{5}{6}$$

.....
(2)

4. Write these numbers in order of size.
Start with the smallest number.



$$\frac{7}{10} \quad \frac{3}{5} \quad \frac{8}{15} \quad \frac{2}{3}$$

$$\frac{21}{30} \quad \frac{18}{30} \quad \frac{16}{30} \quad \frac{20}{30}$$

$$\frac{4}{15} \quad \frac{3}{5} \quad \frac{2}{3} \quad \frac{7}{10}$$

(2)

5. Write these numbers in order of size.
Start with the smallest number.



$$\frac{4}{5} \quad \frac{8}{9} \quad \frac{5}{6} \quad \frac{7}{8}$$

$$\frac{288}{360} \quad \frac{320}{360} \quad \frac{300}{360} \quad \frac{315}{360}$$

LCM of 5 and 9 = 45 $5 \times 3 \times 3$
LCM of 6 and 8 = 24 $2 \times 2 \times 2 \times 3$

45 $\begin{matrix} \textcircled{3} & \textcircled{5} \\ \textcircled{3} & \textcircled{2} \end{matrix}$ 24
 $3 \times 5 \times 3 \times 2 \times 2 \times 2 = 360$

or
0.8 0.8 0.83 0.875 $\frac{4}{5}$ $\frac{5}{6}$ $\frac{7}{8}$ $\frac{8}{9}$
then \rightarrow

(2)

6. A football team wins $\frac{3}{8}$ of their matches in a season



The same team loses $\frac{1}{3}$ of their matches.

Show that the team win more matches than they lose.

win $\frac{9}{24}$ lose $\frac{8}{24}$

$$\frac{9}{24} > \frac{8}{24}$$

therefore the team win more than lose (2)

7. Which of the following fractions is nearest to $\frac{7}{10}$?



Show your working.

$$\frac{28}{40}$$

$$\frac{5}{8} \quad \frac{3}{4} \quad \frac{11}{20} \quad \frac{3}{5}$$

$$\frac{25}{40} \quad \frac{30}{40} \quad \frac{22}{40} \quad \frac{24}{40}$$

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

(3)

8. Circle any fraction that is less than $\frac{3}{8}$



$$\frac{75}{200}$$

$$\frac{2}{5} \quad \left(\frac{3}{10}\right) \quad \frac{9}{20} \quad \left(\frac{9}{25}\right)$$

$$\frac{80}{200} \quad \frac{60}{200} \quad \frac{90}{200} \quad \frac{72}{200}$$

(2)

9. Arrange these fractions in order, smallest first.



$$\frac{3}{4} \quad \frac{47}{60} \quad \frac{2}{3} \quad \frac{17}{24}$$

$$\frac{90}{120} \quad \frac{94}{120} \quad \frac{80}{120} \quad \frac{85}{120}$$

$$\frac{2}{3} \quad \frac{17}{24} \quad \frac{3}{4} \quad \frac{47}{60}$$

(3)

10.



Mary's salary increases by

$$\frac{3}{7} \xrightarrow{\times 5} \frac{15}{35}$$

Michael's salary increases by

$$\frac{2}{5} \xrightarrow{\times 7} \frac{14}{35}$$

Mary claims her salary will increase by more money than Michael's.

Explain why she may not be correct.

Although Mary's salary increases by a larger fraction, it depends on what their starting salary was, to see by how much the increase was.

(2)

11.



$$\begin{array}{ccccc} \frac{1}{3} & \frac{2}{5} & \frac{1}{4} & \frac{3}{10} & \frac{3}{20} \\ \frac{20}{60} & \frac{24}{60} & \frac{15}{60} & \frac{18}{60} & \frac{9}{60} \end{array}$$

Work out the median

$$\frac{3}{20} \quad \frac{1}{4} \quad \frac{3}{10} \quad \frac{1}{3} \quad \frac{2}{5}$$

$$\frac{3}{10}$$

(3)

12. Write these numbers in order of size.
Start with the smallest number.



$$\frac{9}{10} \quad \frac{23}{25} \quad \frac{37}{40} \quad \frac{47}{50}$$

↓ ↓ ↓ ↓

$$\frac{180}{200} \quad \frac{184}{200} \quad \frac{185}{200} \quad \frac{188}{200}$$

$$\frac{9}{10} \quad \frac{23}{25} \quad \frac{37}{40} \quad \frac{47}{50}$$

(3)

13. Alina writes down two fractions



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

Work out which of the two fractions is closer to 1 = $\frac{12}{12}$

$$\frac{16}{12} \quad \frac{9}{12}$$

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

(3)

14. Curtis writes down two fractions



$$\frac{27}{20} \quad \frac{8}{3}$$

Work out which of the two fractions is closer to 2 $\approx \frac{120}{60}$

$$\frac{81}{60} \quad \frac{160}{60}$$

$$\frac{27}{20}$$

(3)

15. Grayson writes down two fractions



$$\frac{1}{4} \quad \frac{13}{10}$$

Work out which of the two fractions is closer to $\frac{7}{9} = \frac{140}{180}$

$$\frac{45}{180}$$

$$\frac{234}{180}$$

$$234 - 140 = 94$$

$$140 - 45 = 95$$

$$\frac{13}{10}$$

(3)

16. Write down a fraction between $\frac{3}{8}$ and $\frac{2}{5}$



$$\frac{15}{40} \quad \frac{16}{40}$$

$$\frac{30}{80} \quad \frac{32}{80}$$

$$\frac{31}{80}$$

(2)

17. Three friends have played the same number of matches of snooker this year.



Kyren has won $\frac{7}{10}$ of the matches that he has played. $\frac{84}{120}$

Mark has won $\frac{7}{8}$ of the matches that he has played. $\frac{105}{120}$

Jordan has won $\frac{5}{6}$ of the matches that he has played. $\frac{100}{120}$

(a) Write the friends in order, starting with the person that has won the most matches.

..... Mark, Jordan, Kyren (2)

Jordan has played less than 500 matches of snooker.

(b) Work out the greatest possible number of matches that he could have played.

Must be a multiple of 120

..... 480 (2)