

Due  
31.8.2021

## Exercise 9(A)

10. Which is the greater of the fractions in each case?

Write your answer using the sign  $<$  or  $>$ .

a).  $\frac{3}{4}$    $\frac{6}{7}$

LCM of 4 & 7 =  $2 \times 2 \times 7 = 28$ .

$$\frac{3}{4} = \frac{3 \times 7}{4 \times 7} = \frac{21}{28}, \quad \frac{6}{7} = \frac{6 \times 4}{7 \times 4} = \frac{24}{28}$$

$$\frac{3}{4} < \frac{6}{7}$$

b.  $\frac{8}{9} \square \frac{5}{6}$ , 9 & 6 LCM =  $3 \times 3 \times$

$$2 = 18. \quad \frac{8}{9} = \frac{8 \times 2}{9 \times 2} = \frac{16}{18}, \quad \frac{5}{6} =$$

$$\frac{5 \times 3}{6 \times 3} = \frac{15}{18}$$

$$\frac{8}{9} \square \frac{5}{6}$$

c.  $\frac{3}{10} \square \frac{5}{8}$

LCM of 10 & 8 =  $2 \times 2 \times 2 \times 5 =$

$$40. \quad \frac{3}{10} = \frac{3 \times 4}{10 \times 4} = \frac{12}{40}, \quad \frac{5}{8} = \frac{5 \times 5}{8 \times 5}$$

$$\frac{25}{40} \quad \text{or} \quad \frac{3^6}{10} \quad \square \quad \frac{5}{8}$$

d)  $\frac{11}{12} \quad \square \quad \frac{8}{9}$

L.C.M of 12 and 9 =  $3 \times 3 \times 4 = 36$

$$\frac{11}{12} = \frac{11 \times 3}{12 \times 3} = \frac{33}{36}, \quad \frac{8}{9} = \frac{8 \times 4}{9 \times 4} = \frac{32}{36}$$

$$\frac{11}{12} > \frac{8}{9}$$

e)  $\frac{6}{7} \quad \square \quad \frac{49}{8}$

$$\frac{48}{7} \quad \square \quad \frac{49}{8}$$

L.C.M of 7 and 8 = ~~2~~  $2 \times 2 \times 2 \times 7$

$$56. \quad \frac{48}{7} = \frac{48 \times 8}{7 \times 8} = \frac{384}{56}$$

$$\frac{49}{8} = \frac{49 \times 7}{8 \times 7} = \frac{343}{56} \quad \frac{66}{7} > \frac{49}{8}$$

f)  $\frac{52}{7} < \frac{41}{8}$

$\frac{36}{7} < \frac{41}{8}$ . LCM of 8 & 7 =

$2 \times 2 \times 2 \times 7 = 56$

$$\frac{36}{7} = \frac{36 \times 8}{7 \times 8} = \frac{288}{56} \quad \frac{41}{8} = \frac{41 \times 7}{8 \times 7} = \frac{287}{56}$$

$\frac{52}{7} > \frac{41}{8}$

g)  $\frac{11}{12} < \frac{12}{15}$

$\frac{23}{12} < \frac{27}{15}$ . LCM of 12

and  $15 = 3 \times 2 \times 2 \times 5 = 60$ .

$$\frac{23}{12} = \frac{23 \times 5}{12 \times 5} = \frac{115}{60}, \quad \frac{27}{15} = \frac{27 \times 4}{15 \times 4} = \frac{108}{60}$$

$$\frac{11}{12} \square \frac{12}{15}$$

$$h) \frac{16}{5} \square \frac{16}{7}$$

$$\frac{80}{5} \square \frac{112}{7} \text{ LCM of 5 and 7}$$

$$5 \times 7 = 35, \quad \frac{80}{5} = \frac{80 \times 7}{5 \times 7} = \frac{560}{35}$$

$$\frac{112}{7} = \frac{112 \times 5}{7 \times 5} = \frac{560}{35}$$

$$\frac{16}{5} \square \frac{16}{7}$$