

Fractions -3

1. Add the following fractions.

- $\frac{8}{9} + \frac{4}{18}$

Answer: LCM of 9 and 18 = 18

$$\frac{8}{9} = \frac{16}{18}$$

$$\frac{16}{18} + \frac{4}{18} = \frac{20}{18} = \frac{10}{9}$$

- $\frac{5}{4} + \frac{17}{12} + \frac{3}{8}$

Answer: LCM of 4, 12 and 8 = 24

$$\frac{5}{4} = \frac{30}{24} \quad \frac{17}{12} = \frac{34}{24} \quad \frac{3}{8} = \frac{9}{24}$$

$$\frac{30}{24} + \frac{34}{24} + \frac{9}{24} = \frac{73}{24}$$

- $1\frac{1}{5} + 3\frac{2}{5}$

Answer: $(1 + 3) + (\frac{1}{5} + \frac{2}{5}) =$

$$4 + \frac{(1+2)}{5} = 4\frac{3}{5}$$

2. What is $2\frac{2}{7} + 5\frac{17}{21}$?

Answer: LCM of 7 and 21 = 21 and $\frac{2}{7} = \frac{6}{21}$

$$(2+5) + (\frac{6}{21} + \frac{17}{21})$$

$$= 7 + (\frac{23}{21}) \quad (\text{and } \frac{23}{21} = 1\frac{2}{21})$$

$$= 7 + 1\frac{2}{21} = 8\frac{2}{21}$$

3. What is $\frac{6}{11} - \frac{11}{22}$?

Answer: LCM of 11 and 22 = 22 and $\frac{6}{11} = \frac{12}{22}$

$$\frac{12}{22} - \frac{11}{22} = \frac{1}{22}$$

4. What is $7\frac{8}{13} - 1\frac{14}{26}$?

Answer: LCM of 13 and 26 = 26 and $\frac{8}{13} = \frac{16}{26}$

$$(7-1) + (\frac{16}{26} - \frac{14}{26}) =$$

$$6 + \frac{(16-14)}{26} = 6\frac{2}{26} = 6\frac{1}{13}$$

5. What is $5\frac{4}{9} \times 3\frac{3}{5}$?

Answer: $5\frac{4}{9} = \frac{(9 \times 5) + 4}{9} = \frac{49}{9}$

$$3\frac{3}{5} = \frac{(5 \times 3) + 3}{5} = \frac{18}{5}$$

$$\frac{49}{9} \times \frac{18}{5} = 49 \times \frac{2}{5} = \frac{98}{5}$$

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6. Divide $6\frac{6}{10}$ by $2\frac{7}{8}$.

$$\text{Answer: } 6\frac{6}{10} = \frac{(10 \times 6) + 6}{10} = \frac{66}{10}$$

$$2\frac{7}{8} = \frac{(8 \times 2) + 7}{8} = \frac{23}{8}$$

$$\text{Reciprocal of } \frac{23}{8} = \frac{8}{23}$$

$$\begin{aligned} \frac{66}{10} \times \frac{8}{23} &= \frac{66}{5} \times \frac{4}{23} \\ &= \frac{264}{115} \end{aligned}$$

7. What is $3\frac{2}{3} + 4\frac{2}{3}$?

$$\text{Answer: } (3 + 4) + (\frac{2}{3} + \frac{2}{3}) =$$

$$7 + \frac{(2+2)}{3} = 7 + \frac{4}{3}$$

$$7 + 1\frac{1}{3} = 8\frac{1}{3} \text{ (because } \frac{4}{3} = 1\frac{1}{3}\text{)}$$

8. Add $5\frac{5}{18}$ and $8\frac{1}{6}$.

$$\text{Answer: LCM of 18 and 6} = 18 \text{ and } \frac{1}{6} = \frac{3}{18}$$

$$(5 + 8) + (\frac{5}{18} + \frac{1}{6}) = (5 + 8) + (\frac{5}{18} + \frac{3}{18})$$

$$13\frac{8}{18} = 13\frac{4}{9}$$

9. Subtract $3\frac{2}{7}$ from $6\frac{10}{14}$.

$$\text{Answer: LCM of 7 and 14} = 14 \text{ and } \frac{2}{7} = \frac{4}{14}$$

$$(6 - 3) + (\frac{10}{14} - \frac{4}{14})$$

$$3 + \frac{6}{14} = 3\frac{6}{14} = 3\frac{3}{7}$$

10. Subtract $4\frac{1}{9}$ from $7\frac{2}{3}$.

$$\text{Answer: LCM of 9 and 3} = 9 \text{ and } \frac{2}{3} = \frac{6}{9}$$

$$(7 - 4) + (\frac{6}{9} - \frac{1}{9})$$

$$3\frac{5}{9}$$

How did you do? If you didn't do well, watch the following videos and try again!

- [Addition of Fractions](#)
- [Subtraction of Fractions](#)
- [Multiplication of Fractions](#)
- [Dividing Fractions](#)