



Grade 5

Mathematics

Adding mixed numbers

Question 1: Adding Mixed numbers

1. $4\frac{1}{5} + 2\frac{2}{5}$

2. $3\frac{4}{7} + 2\frac{1}{14}$

3. $12\frac{1}{4} + 3\frac{1}{3}$

4. $9\frac{7}{9} + 7\frac{1}{4}$

5. $14\frac{4}{5} + 5\frac{2}{5}$

6. $67\frac{5}{7} + 12\frac{9}{14}$

7. $45\frac{2}{3} + 21\frac{3}{4}$

8. $9\frac{5}{6} + \frac{4}{5}$

① $4\frac{1}{5} + 2\frac{2}{5}$
 $= 6\frac{3}{5}$

② $3\frac{4}{7} + 2\frac{1}{14}$
 $= 3\frac{8}{14} + 2\frac{1}{14}$
 $= 5\frac{9}{14}$

③ $12\frac{1}{4} + 3\frac{1}{3}$
 $= 12\frac{3}{12} + 3\frac{4}{12}$
 $= 15\frac{7}{12}$

④ $9\frac{7}{9} + 7\frac{1}{4}$
 $= 9\frac{28}{36} + 7\frac{9}{36}$
 $= 16\frac{37}{36}$

⑤ $14\frac{4}{5} + 5\frac{2}{5}$
 $= 19\frac{6}{5}$
 $= 20\frac{1}{5}$

⑥ $67\frac{5}{7} + 12\frac{1}{4}$
 $= 67\frac{10}{14} + 12\frac{3.5}{14}$
 $= 79\frac{13.5}{14}$
 $= 80\frac{5}{14}$

⑦ $45\frac{2}{3} + 21\frac{3}{4}$
 $= 45\frac{8}{12} + 21\frac{9}{12}$
 $= 66\frac{17}{12}$
 $= 67\frac{5}{12}$

⑧ $9\frac{5}{6} + \frac{4}{5}$
 $= 9\frac{25}{30} + \frac{24}{30}$
 $= 9\frac{49}{30}$
 $= 10\frac{19}{30}$

Question 2: Words problems - adding mixed numbers

1. A waiter at a pizza restaurant wanted to work out how much pizza his tables didn't eat in an evening (the leftovers). The first of 6 people left $1\frac{5}{8}$ of a pizza. The second, a table of eight, left $2\frac{1}{2}$. How much pizza did these two tables leave together?

① $1\frac{5}{8} + 2\frac{1}{2}$
 $= 1\frac{5}{8} + 2\frac{4}{8}$
 $= 3\frac{9}{8}$
 $= 4\frac{1}{8}$

They left $4\frac{1}{8}$ pizzas together.

2. Shelley wants to put compost on various parts of her garden. She needs four and two thirds of a bag for her roses, and five and seven eighths of a bag for her vegetables. How much does she need altogether?

$$\begin{aligned} \textcircled{2} \quad & 4\frac{2}{3} + 5\frac{7}{8} && \text{Shelley needs } 10\frac{13}{24} \\ & = 4\frac{16}{24} + 5\frac{21}{24} && \text{bags of compost.} \\ & = 9\frac{37}{24} \\ & = 10\frac{13}{24} \end{aligned}$$

3. Sbu runs five and a half km on Thursday, nine and three-quarter km on Saturday, and two and two thirds of a km on Sunday. What was his total distance over these three runs?

$$\begin{aligned} \textcircled{3} \quad & 5\frac{1}{2} + 9\frac{3}{4} + 2\frac{2}{3} && \text{Sbu's total} \\ & = 5\frac{6}{12} + 9\frac{9}{12} + 2\frac{8}{12} && \text{distance is} \\ & = 16\frac{23}{12} && 17\frac{11}{12} \text{ km.} \\ & = 17\frac{11}{12} \end{aligned}$$

4. What is the sum of one hundred and twenty-three and two fifths, and sixty-seven and three quarters?

$$\begin{aligned} \textcircled{4} \quad & 123\frac{2}{5} + 67\frac{3}{4} && \text{The sum is} \\ & = 123\frac{8}{20} + 67\frac{15}{20} && 191\frac{3}{20}. \\ & = 190\frac{23}{20} \\ & = 191\frac{3}{20} \end{aligned}$$