



Grade 5

Mathematics

Subtracting mixed numbers

Question 1: Subtracting mixed numbers

- $5\frac{5}{6} - 2\frac{1}{6}$
- $6\frac{2}{3} - 1\frac{1}{9}$
- $7\frac{1}{2} - 5\frac{1}{4}$
- $18\frac{5}{7} - 11\frac{1}{5}$
- $4\frac{3}{4} - 2\frac{1}{3}$
- $9\frac{7}{10} - 3\frac{2}{5}$
- $15\frac{2}{9} - 12\frac{4}{9}$
- $11\frac{1}{4} - 2\frac{1}{2}$
- $14\frac{1}{6} - 5\frac{1}{4}$
- $17\frac{2}{15} - 7\frac{17}{20}$

① $5\frac{5}{6} - 2\frac{1}{6}$
 $= 3\frac{4}{6}$
 $= 3\frac{2}{3}$ *can be simplified to this, but doesn't need to be*

② $6\frac{2}{3} - 1\frac{1}{9}$
 $= 6\frac{6}{9} - 1\frac{1}{9}$
 $= 5\frac{5}{9}$

③ $7\frac{1}{2} - 5\frac{1}{4}$
 $= 7\frac{2}{4} - 5\frac{1}{4}$
 $= 2\frac{1}{4}$

④ $18\frac{5}{7} - 11\frac{1}{5}$
 $= 18\frac{25}{35} - 11\frac{7}{35}$
 $= 7\frac{18}{35}$

⑤ $4\frac{3}{4} - 2\frac{1}{3}$
 $= 4\frac{9}{12} - 2\frac{4}{12}$
 $= 2\frac{5}{12}$

⑥ $9\frac{7}{10} - 3\frac{2}{5}$
 $= 9\frac{7}{10} - 3\frac{4}{10}$
 $= 6\frac{3}{10}$

⑦ $15\frac{2}{9} - 12\frac{4}{9}$
 $= 14\frac{11}{9} - 12\frac{4}{9}$
 $= 2\frac{7}{9}$

⑧ $11\frac{1}{4} - 2\frac{1}{2}$
 $= 11\frac{1}{4} - 2\frac{2}{4}$
 $= 10\frac{5}{4} - 2\frac{2}{4}$
 $= 8\frac{3}{4}$

⑨ $14\frac{1}{6} - 5\frac{3}{4}$
 $= 14\frac{2}{12} - 5\frac{9}{12}$
 $= 13\frac{14}{12} - 5\frac{9}{12}$
 $= 8\frac{11}{12}$

⑩ $17\frac{2}{15} - 7\frac{17}{20}$
 $= 17\frac{8}{60} - 7\frac{51}{60}$
 $= 16\frac{68}{60} - 7\frac{51}{60}$
 $= 9\frac{17}{60}$

2: Words problems – subtracting mixed numbers

1. At the start of a pizza party at Chiara's house, there were $5\frac{1}{2}$ pizzas (her brother, who wasn't invited was given the other half pizza for supper). Chiara and her friends ate $3\frac{3}{8}$. How many pizzas were left over?

$$\begin{aligned} \textcircled{1} \quad & 5\frac{1}{2} - 3\frac{3}{8} && \text{There were } 2\frac{1}{8} \\ & = 5\frac{4}{8} - 3\frac{3}{8} && \text{pizzas left} \\ & = 2\frac{1}{8} && \text{over.} \end{aligned}$$

2. Keegan and Noah had four and a half hours of free time. They went surfing for two and eleven twelfths' hours. How much free time do they still have?

$$\begin{aligned} \textcircled{2} \quad & 4\frac{1}{2} - 2\frac{11}{12} && \text{They have } 1\frac{7}{12} \\ & = 4\frac{6}{12} - 2\frac{11}{12} && \text{hours of free} \\ & = 3\frac{18}{12} - 2\frac{11}{12} && \text{time left.} \\ & = 1\frac{7}{12} \end{aligned}$$

3. Mujahid set himself the task of reading some books over the holiday. At the start of the week, he had four and three fifths' books left to read. During the week he read two and a half books. How many books till he reaches his goal?

$$\begin{aligned} \textcircled{3} \quad & 4\frac{3}{5} - 2\frac{1}{2} && \text{Mujahid has } 2\frac{1}{10} \\ & = 4\frac{6}{10} - 2\frac{5}{10} && \text{books left to} \\ & = 2\frac{1}{10} && \text{read.} \end{aligned}$$

4. What is twelve and four sevenths' less eight and three quarters.

$$\begin{aligned} \textcircled{4} \quad & 12\frac{4}{7} - 8\frac{3}{4} && \text{It is } 3\frac{23}{28}. \\ & = 12\frac{16}{28} - 8\frac{21}{28} \\ & = 11\frac{44}{28} - 8\frac{21}{28} \\ & = 3\frac{23}{28} \end{aligned}$$