

Guided worksheet on adding two mixed numbers with unlike denominators

Learn how [to add two mixed numbers](#) when they have the different denominators. It is highly recommended for students to fill in all the blanks in each problem given below:

(Remember, lcd is the key for such problems)

$$1) \quad 1\frac{1}{3} + 4\frac{1}{2}$$

The first step is to change both the denominators to a common denominator

$$= 1\frac{1 \times 2}{3 \times 2} + 4\frac{1 \times 3}{2 \times 3}$$

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

$$= 5\frac{\square}{6}$$

Once the denominators are same, add the numerators to get the numerator for the answering fraction and add whole numbers to find the new whole number.

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

LCD of 4 and 6 is 12.

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

$$= \square\frac{\square}{12} + \square\frac{2}{\square} = 7\frac{8}{\square} = \square\frac{2}{3}$$

$$5) \quad 5\frac{5}{12} + 2\frac{3}{16}$$

Least common denominator (lcd) for 12 and 16 = 48.

$$= 5\frac{\square \times 4}{12 \times 4} + \square\frac{\square \times \square}{\square \times 3}$$

$$= \square\frac{\square}{48} + 2\frac{9}{\square} = 7\frac{\square}{48}$$

$$2) \quad 6\frac{2}{3} + 1\frac{2}{9}$$

LCD for 3 and 9 is 9.

$$= 6\frac{2 \times \square}{3 \times \square} + 1\frac{\square}{9}$$

$$= 6\frac{6}{\square} + 1\frac{2}{9} = 7\frac{\square}{\square}$$

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

LCD for 3 and 5 is 15

$$= 3\frac{2 \times \square}{5 \times \square} + 2\frac{\square \times \square}{3 \times \square}$$

$$= 3\frac{6}{\square} + 2\frac{5}{15} = \square\frac{\square}{15}$$

$$6) \quad 7\frac{7}{12} + 3\frac{3}{8}$$

Lcd for 12 & 8 = 24

$$= \square\frac{\square \times 2}{12 \times 2} + 3\frac{\square \times \square}{\square \times 3}$$

$$= \square\frac{14}{\square} + 3\frac{9}{\square} = \square\frac{\square}{24}$$