Adding & Subtracting Fractions - Worksheet

Skill

Group A - Fractions with a common denominator

Work out the following - give your answers as a fraction in its simplest form:

1) $\dfrac{1}{3} + \dfrac{1}{3}$

2) $\dfrac{1}{5} + \dfrac{1}{5}$

3) $\dfrac{1}{4} + \dfrac{1}{4}$

4) $\dfrac{2}{3} - \dfrac{1}{3}$

5) $\dfrac{2}{5} - \dfrac{1}{5}$

6) $\dfrac{2}{7} - \dfrac{1}{7}$

7) $\dfrac{3}{5} + \dfrac{1}{5}$

8) $\dfrac{3}{8} + \dfrac{1}{8}$

9) $\dfrac{3}{10} + \dfrac{1}{10}$

10) $\dfrac{3}{5} - \dfrac{1}{5}$

11) $\dfrac{3}{8} - \dfrac{1}{8}$

12) $\dfrac{3}{10} - \dfrac{1}{10}$

Group B - Fractions with no common denominator

Work out the following - give your answers as a fraction in its simplest form:

1) $\dfrac{1}{5} + \dfrac{1}{4}$

2) $\dfrac{3}{5} + \dfrac{1}{4}$

3) $\dfrac{4}{5} + \dfrac{1}{4}$

4) $\dfrac{4}{5} - \dfrac{1}{4}$

5) $\dfrac{3}{5} - \dfrac{1}{4}$

6) $\dfrac{2}{5} - \dfrac{1}{4}$

7) $\dfrac{3}{8} + \dfrac{1}{3}$

8) $\dfrac{5}{8} + \dfrac{1}{3}$

9) $\dfrac{3}{8} + \dfrac{2}{3}$

10) $\dfrac{6}{7} - \dfrac{1}{2}$

11) $\dfrac{5}{7} - \dfrac{1}{2}$

12) $\dfrac{4}{7} - \dfrac{1}{2}$

Adding & Subtracting Fractions - Worksheet

Group C - Mixed numbers

Work out the following - give your answers as a fraction in its simplest form:

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

2) $1\frac{1}{2} + 1\frac{1}{5}$

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

4) $2\frac{1}{3} - 1\frac{1}{5}$

5) $2\frac{1}{3} - 1\frac{1}{4}$

6) $2\frac{1}{3} - 1\frac{1}{6}$

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

8) $2\frac{1}{5} + 1\frac{2}{3}$

9) $2\frac{3}{5} + 1\frac{2}{3}$

10) $3\frac{3}{4} - 1\frac{1}{3}$

11) $3\frac{3}{4} - 1\frac{2}{3}$

12) $3\frac{1}{4} - 1\frac{2}{3}$

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2

Adding & Subtracting Fractions - Worksheet

Applied

1) Work out:

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

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

2) **(a)** Holly spends $\frac{1}{4}$ of her pocket-money on make-up and $\frac{1}{3}$ of her pocket-money on clothes. Holly saves the rest of her pocket-money. What fraction of her pocket-money does Holly save?

(b) Patrick spends $\frac{1}{5}$ of his pocket-money on music and $\frac{2}{7}$ of his pocket-money on clothes. Patrick saves the rest of his pocket-money. What fraction of his pocket-money does Patrick save?

3) **(a)** There are two tins of paint. In the first tin there are $2\frac{1}{3}$ litres of paint.

In the second tin there are $1\frac{3}{5}$ litres of paint. How many litres of paint are there altogether?

(b) For my recipe I need $5\,kg$ of flour. In one bag I have $2\frac{2}{3}kg$ of flour.

In a second bag I have $1\frac{3}{8}kg$ of flour. How much more flour do I need in kg?

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Adding & Subtracting Fractions - Exam Questions

1) Work out. Circle the answer.

$$\frac{5}{9} + \frac{8}{9}$$

....

(1 mark)

$$1\frac{4}{9} \quad \frac{13}{18} \quad 1\frac{3}{9} \quad \frac{13}{81}$$

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2) Work out. Give your answer as a mixed number.

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

....

(3 marks)

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3) Here are 2 fractions. Which fraction is closest to 1? You must show your working.

$$\frac{7}{8} \quad \frac{8}{7}$$

....

(3 marks)

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4

Adding & Subtracting Fractions - Answers

	Question	**Answer**
Group A	Skill Questions	
	Work out the following - give your answers as a fraction in its simplest form: **1)** $\frac{1}{3} + \frac{1}{3}$ **2)** $\frac{1}{5} + \frac{1}{5}$ **3)** $\frac{1}{4} + \frac{1}{4}$ **4)** $\frac{2}{3} - \frac{1}{3}$ **5)** $\frac{2}{5} - \frac{1}{5}$ **6)** $\frac{2}{7} - \frac{1}{7}$ **7)** $\frac{3}{5} + \frac{1}{5}$ **8)** $\frac{3}{8} + \frac{1}{8}$ **9)** $\frac{3}{10} + \frac{1}{10}$ **10)** $\frac{3}{5} - \frac{1}{5}$ **11)** $\frac{3}{8} - \frac{1}{8}$ **12)** $\frac{3}{10} - \frac{1}{10}$	**1)** $\frac{2}{3}$ **2)** $\frac{2}{5}$ **3)** $\frac{1}{2}$ **4)** $\frac{1}{3}$ **5)** $\frac{1}{5}$ **6)** $\frac{1}{7}$ **7)** $\frac{4}{5}$ **8)** $\frac{1}{2}$ **9)** $\frac{2}{5}$ **10)** $\frac{2}{5}$ **11)** $\frac{1}{4}$ **12)** $\frac{1}{5}$

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Adding & Subtracting Fractions - Answers

	Question	Answer
Group B	Skill Questions	
	Work out the following - give your answers as a fraction in its simplest form: **1)** $\frac{1}{5} + \frac{1}{4}$ **2)** $\frac{3}{5} + \frac{1}{4}$ **3)** $\frac{4}{5} + \frac{1}{4}$ **4)** $\frac{4}{5} - \frac{1}{4}$ **5)** $\frac{3}{5} - \frac{1}{4}$ **6)** $\frac{2}{5} - \frac{1}{4}$ **7)** $\frac{3}{8} + \frac{1}{3}$ **8)** $\frac{5}{8} + \frac{1}{3}$ **9)** $\frac{3}{8} + \frac{2}{3}$ **10)** $\frac{6}{7} - \frac{1}{2}$ **11)** $\frac{5}{7} - \frac{1}{2}$ **12)** $\frac{4}{7} - \frac{1}{2}$	**1)** $\frac{9}{20}$ **2)** $\frac{17}{20}$ **3)** $1\frac{1}{20}$ **4)** $\frac{11}{20}$ **5)** $\frac{7}{20}$ **6)** $\frac{3}{20}$ **7)** $\frac{17}{24}$ **8)** $\frac{23}{24}$ **9)** $1\frac{1}{24}$ **10)** $\frac{5}{14}$ **11)** $\frac{3}{14}$ **12)** $\frac{1}{14}$

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6

Adding & Subtracting Fractions - Answers

	Question	Answer
Group C	Skill Questions	
	Work out the following - give your answers as a fraction in its simplest form:	
	1) $1\frac{1}{2} + 1\frac{1}{4}$	**1)** $2\frac{3}{4}$
	2) $1\frac{1}{2} + 1\frac{1}{5}$	**2)** $2\frac{7}{10}$
	3) $1\frac{1}{2} + 1\frac{1}{6}$	**3)** $2\frac{2}{3}$
	4) $2\frac{1}{3} - 1\frac{1}{5}$	**4)** $1\frac{2}{15}$
	5) $2\frac{1}{3} - 1\frac{1}{4}$	**5)** $1\frac{1}{12}$
	6) $2\frac{1}{3} - 1\frac{1}{6}$	**6)** $1\frac{1}{6}$
	7) $2\frac{1}{5} - 1\frac{3}{4}$	**7)** $3\frac{19}{20}$
	8) $2\frac{1}{5} + 1\frac{2}{3}$	**8)** $3\frac{13}{15}$
	9) $2\frac{3}{5} + 1\frac{2}{3}$	**9)** $4\frac{4}{15}$
	10) $3\frac{3}{4} - 1\frac{1}{3}$	**10)** $2\frac{5}{12}$
	11) $3\frac{3}{4} - 1\frac{2}{3}$	**11)** $2\frac{1}{12}$
	12) $3\frac{1}{4} - 1\frac{2}{3}$	**12)** $1\frac{7}{12}$

Adding & Subtracting Fractions - Answers

	Question	Answer
	Applied Questions	
1)	Work out: **a)** $\frac{1}{5} + \frac{1}{2} + \frac{1}{3}$ **b)** $\frac{4}{5} - \frac{1}{2} + \frac{2}{3}$	**a)** $1\frac{1}{30}$ **b)** $\frac{29}{30}$
2)	**a)** Holly spends $\frac{1}{4}$ of her pocket-money on make-up and $\frac{1}{3}$ of her pocket-money on clothes. Holly saves the rest of her pocket-money. What fraction of her pocket-money does Holly save? **b)** Patrick spends $\frac{1}{5}$ of his pocket-money on music and $\frac{2}{7}$ of his pocket-money on clothes. Patrick saves the rest of his pocket-money. What fraction of his pocket-money does Patrick save?	**a)** $\frac{7}{12}$ **b)** $\frac{18}{35}$
3)	**a)** There are two tins of paint. In the first tin there are $2\frac{1}{3}$ litres of paint. In the second tin there are $1\frac{3}{5}$ litres of paint. How many litres of paint are there altogether? **b)** For my recipe I need $5\ kg$ of flour. In one bag I have $2\frac{2}{3}kg$ of flour. In a second bag I have $1\frac{3}{8}kg$ of flour. How much more flour do I need in kg?	**a)** $3\frac{14}{15}$ litres **b)** $\frac{23}{24}kg$

Adding & Subtracting Fractions - Mark Scheme

	Question	Answer	
	Exam Questions		
1)	Work out. $\frac{5}{9} + \frac{8}{9}$	Circle the answer. $1\frac{4}{9}$ $\frac{13}{18}$ $1\frac{3}{9}$ $\frac{13}{81}$ Correct answer is $1\frac{4}{9}$.	**(1)**
2)	Work out. Give your answer as a mixed number. $\frac{6}{7} + \frac{3}{4}$	$\frac{6}{7} + \frac{3}{4} = \frac{24}{28} + \frac{21}{28}$ $\frac{24+21}{28} = \frac{45}{28}$ $\frac{45}{28} = 1\frac{17}{28}$	**(3)**
3)	Here are 2 fractions. $\frac{7}{8}$ $\frac{8}{7}$ Which fraction is closest to 1? You must show your working.	$\frac{7}{8} = \frac{49}{56}$ $\frac{8}{7} = \frac{64}{56}$ $\frac{56}{56} - \frac{49}{56} = \frac{7}{56}$ $\frac{64}{56} - \frac{56}{56} = \frac{8}{56}$ Closest fraction to 1 is $\frac{7}{8}$.	**(3)**