Subtracting Fractions - Worksheet

Skill

Group A - Subtracting fractions with common denominators

Calculate and give your answer in its simplest form:

1) $\frac{6}{9} - \frac{2}{9}$

2) $\frac{6}{9} - \frac{6}{9}$

3) $\frac{6}{19} - \frac{4}{19} - \frac{2}{19}$

4) $\frac{16}{19} - \frac{6}{19}$

5) $\frac{16}{19} - \frac{5}{19}$

6) $\frac{16}{25} - \frac{5}{25} - \frac{4}{25}$

7) $\frac{5}{10} - \frac{1}{10}$

8) $\frac{5}{18} - \frac{1}{18}$

9) $\frac{13}{16} - \frac{12}{16} - \frac{1}{16}$

10) $1 - \frac{2}{7}$

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

12) $1 - \frac{7}{100} - \frac{70}{100}$

Group B - Subtracting fractions with different denominators

Calculate and give your answer in its simplest form:

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

2) $\frac{8}{9} - \frac{1}{3}$

3) $\frac{7}{15} - \frac{1}{5}$

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

5) $\frac{11}{15} - \frac{1}{6}$

6) $\frac{11}{13} - \frac{1}{2}$

7) $\frac{8}{9} - \frac{3}{5}$

8) $\frac{39}{100} - \frac{7}{20}$

9) $\frac{2}{3} - \frac{9}{16}$

10) $\frac{8}{13} - \frac{3}{10}$

11) $\left(\frac{8}{9} - \frac{2}{7}\right) - \left(\frac{3}{7} - \frac{1}{9}\right)$

12) $\frac{4}{3} - \left(\frac{11}{12} - \frac{1}{4}\right)$

Group C - Subtracting mixed numbers

Calculate and give your answer in its simplest form:

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

2) $2\frac{2}{3} - 1\frac{1}{9}$

3) $2\frac{1}{2} - 1\frac{1}{9}$

4) $2\frac{1}{3} - 1\frac{1}{9}$

5) $2\frac{1}{2} - 1\frac{1}{9} - 1$

6) $2\frac{1}{3} - 1\frac{4}{9}$

7) $2\frac{1}{3} - 1\frac{1}{9} - 1$

8) $3\frac{3}{5} - 2\frac{1}{4}$

9) $2\frac{1}{2} - 1\frac{1}{3}$

10) $4\frac{3}{4} - 2\frac{4}{5}$

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

12) $5\frac{1}{5} - 3\frac{2}{7}$

Subtracting Fractions - Worksheet

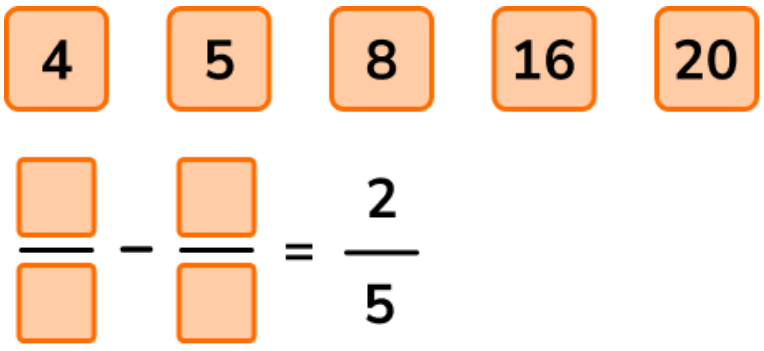
Applied

1) This week Lewis spent $\frac{1}{2}$ of his pocket money on a ticket for a football match. He also spent $\frac{1}{8}$ of his pocket money on a top at the match. What fraction of his pocket money does Lewis have left?

2) Sarah has a bag of flour that contains $\frac{5}{6}$ kg. She uses $\frac{3}{5}$ kg of flour to make a cake. How much flour does Sarah have left?

3) Andy has a bottle that contains $\frac{7}{10}$ litres of water. He pours out some water and now has $\frac{1}{4}$ of a litre left. How much water did Andy pour out?

4) Arrange the numbered cards to make the calculation below correct.



Each card can only be used once.

5) Adam is shown the two fractions $\frac{10}{9}$ and $\frac{3}{4}$. He says the difference between them is $\frac{7}{5}$. Is Adam correct? Show how you decide.

6) Adnan has started reading a new book. On Saturday he reads $\frac{2}{15}$ of the book. On Sunday he reads a further $\frac{1}{3}$ of the total number of pages in the book. On Monday he reads another $\frac{1}{5}$ of the total number of pages in the book. On Tuesday he finished the book. What fraction of the book did he read on Tuesday? Write your answer in its simplest form.

Subtracting Fractions - Exam Questions

1) **(a)** Work out $\frac{11}{12} - \frac{5}{6}$

.....

(2)

(b) Work out $\frac{8}{9} - \frac{2}{3}$

.....

(2)

(4 marks)

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2) **(a)** Work out $5\frac{2}{3} - 2\frac{3}{4}$

.....

(3)

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

.....

(3)

(6 marks)

Subtracting Fractions - Exam Questions

3) In a bag there are red, blue and yellow counters.

$\frac{3}{8}$ of the counters are red.

$\frac{1}{6}$ of the counters are blue.

What fraction of the counters are yellow?

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(2 marks)

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4) Katie is walking from Laughton to Abbeyhill.

Work out the distance from Abbeyhill to Journey's End.

.....miles

(3 marks)

Subtracting Fractions - Answers

	Question	Answer
	Skill Questions	
Group A	Calculate and give your answer in its simplest form:	
	1) $\frac{6}{9} - \frac{2}{9}$	**1)** $\frac{4}{9}$
	2) $\frac{6}{9} - \frac{6}{9}$	**2)** 0
	3) $\frac{6}{19} - \frac{4}{19} - \frac{2}{19}$	**3)** 0
	4) $\frac{16}{19} - \frac{6}{19}$	**4)** $\frac{10}{19}$
	5) $\frac{16}{19} - \frac{5}{19}$	**5)** $\frac{11}{19}$
	6) $\frac{16}{25} - \frac{5}{25} - \frac{4}{25}$	**6)** $\frac{7}{25}$
	7) $\frac{5}{10} - \frac{1}{10}$	**7)** $\frac{4}{10} = \frac{2}{5}$
	8) $\frac{5}{18} - \frac{1}{18}$	**8)** $\frac{4}{18} = \frac{2}{9}$
	9) $\frac{13}{16} - \frac{12}{16} - \frac{1}{16}$	**9)** 0
	10) $1 - \frac{2}{7}$	**10)** $\frac{5}{7}$
	11) $1 - \frac{2}{11}$	**11)** $\frac{9}{11}$
	12) $1 - \frac{7}{100} - \frac{70}{100}$	**12)** $\frac{23}{100}$

Subtracting Fractions - Answers

Group B	Calculate and give your answer in its simplest form:	
	1) $\frac{4}{5} - \frac{2}{3}$	**1)** $\frac{2}{15}$
	2) $\frac{8}{9} - \frac{1}{3}$	**2)** $\frac{5}{9}$
	3) $\frac{7}{15} - \frac{1}{5}$	**3)** $\frac{4}{15}$
	4) $\frac{3}{4} - \frac{2}{5}$	**4)** $\frac{7}{20}$
	5) $\frac{11}{15} - \frac{1}{6}$	**5)** $\frac{17}{30}$
	6) $\frac{11}{13} - \frac{1}{2}$	**6)** $\frac{9}{26}$
	7) $\frac{8}{9} - \frac{3}{5}$	**7)** $\frac{13}{45}$
	8) $\frac{39}{100} - \frac{7}{20}$	**8)** $\frac{1}{25}$
	9) $\frac{2}{3} - \frac{9}{16}$	**9)** $\frac{5}{48}$
	10) $\frac{8}{13} - \frac{3}{10}$	**10)** $\frac{41}{130}$
	11) $\left(\frac{8}{9} - \frac{2}{7}\right) - \left(\frac{3}{7} - \frac{1}{9}\right)$	**11)** $\frac{2}{7}$
	12) $\frac{4}{3} - \left(\frac{11}{12} - \frac{1}{4}\right)$	**12)** $\frac{2}{3}$

Subtracting Fractions - Answers

Group C	Calculate and give your answer in its simplest form:	
	1) $1\frac{1}{2} - 1\frac{1}{3}$	**1)** $\frac{1}{6}$
	2) $2\frac{2}{3} - 1\frac{1}{9}$	**2)** $1\frac{5}{9}$
	3) $2\frac{1}{2} - 1\frac{1}{9}$	**3)** $1\frac{7}{18}$
	4) $2\frac{1}{3} - 1\frac{1}{9}$	**4)** $1\frac{2}{9}$
	5) $2\frac{1}{2} - 1\frac{1}{9} - 1$	**5)** $\frac{7}{18}$
	6) $2\frac{1}{3} - 1\frac{4}{9}$	**6)** $\frac{8}{9}$
	7) $2\frac{1}{3} - 1\frac{1}{9} - 1$	**7)** $1\frac{2}{9}$
	8) $3\frac{3}{5} - 2\frac{1}{4}$	**8)** $1\frac{7}{20}$
	9) $2\frac{1}{2} - 1\frac{1}{3}$	**9)** $1\frac{1}{6}$
	10) $4\frac{3}{4} - 2\frac{4}{5}$	**10)** $1\frac{19}{20}$
	11) $4\frac{3}{4} - 1\frac{1}{2}$	**11)** $3\frac{1}{4}$
	12) $5\frac{1}{5} - 3\frac{2}{7}$	**12)** $1\frac{32}{35}$

Subtracting Fractions - Answers

	Question	Answer
	Applied Questions	
1)	This week Lewis spent $\frac{1}{2}$ of his pocket money on a ticket for a football match. He also spent $\frac{1}{8}$ of his pocket money on a top at the match. What fraction of his pocket money does Lewis have left?	$\frac{3}{8}$
2)	Sarah has a bag of flour that contains $\frac{5}{6}$ kg. She uses $\frac{3}{5}kg$ of flour to make a cake. How much flour does Sarah have left?	$\frac{7}{30}kg$
3)	Andy has a bottle that contains $\frac{7}{10}$ litres of water. He pours out some water and now has $\frac{1}{4}$ of a litre left. How much water did Andy pour out?	$\frac{9}{20}$ litres
4)	Arrange the numbered cards to make the calculation below correct. 4 5 8 16 20 $\frac{\square}{\square} - \frac{\square}{\square} = \frac{2}{5}$ Each card can only be used once.	$\frac{4}{5} - \frac{8}{20} = \frac{2}{5}$

Subtracting Fractions - Answers

5)	Adam is shown the two fractions $\frac{10}{9}$ and $\frac{3}{4}$. He says the difference between them is $\frac{7}{5}$. Is Adam correct? Show how you decide.	No. The difference is $\frac{10}{9} - \frac{3}{4}$ $= \frac{40}{36} - \frac{27}{36}$ $= \frac{13}{36}$
6)	Adnan has started reading a new book. On Saturday he reads $\frac{2}{15}$ of the book. On Sunday he reads a further $\frac{1}{3}$ of the total number of pages in the book. On Monday he reads another $\frac{1}{5}$ of the total number of pages in the book. On Tuesday he finished the book. What fraction of the book did he read on Tuesday? Write your answer in its simplest form.	$\frac{1}{3}$

Subtracting Fractions - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	Work out $\frac{11}{12} - \frac{5}{6}$	(a) Using a common denominator eg. 12 $\frac{1}{12}$	(1) (1)
(b)	Work out $\frac{8}{9} - \frac{2}{3}$	(b) Using a common denominator eg. 9 $\frac{2}{9}$	(1) (1)
2) (a)	Work out $5\frac{2}{3} - 2\frac{3}{4}$	(a) $\frac{17}{3} - \frac{11}{4}$ $\frac{68}{12} - \frac{33}{12}$ $\frac{35}{12}$ **or** $2\frac{11}{12}$	(1) (1) (1)
(b)	Work out $3\frac{2}{5} - 1\frac{3}{4}$	(b) $\frac{17}{5} - \frac{7}{4}$ $\frac{68}{20} - \frac{35}{20}$ $\frac{33}{20}$ **or** $1\frac{13}{20}$	(1) (1) (1)
3)	In a bag there are red, blue and yellow counters. $\frac{3}{8}$ of the counters are red. $\frac{1}{6}$ of the counters are blue. What fraction of the counters are yellow?	$1 - \frac{3}{8} - \frac{1}{6}$ $\frac{11}{24}$	(1) (1)

Subtracting Fractions - Mark Scheme

4)	Katie is walking from Laughton to Abbeyhill.  Work out the distance from Abbeyhill to Journey's End.	$9\frac{2}{5} - 1\frac{3}{4}$ **or** $\frac{47}{5} - \frac{7}{4}$ $\frac{188}{20} - \frac{35}{20}$ $\frac{153}{20}$ **or** $7\frac{13}{20}$	**(1)** **(1)** **(1)**