Adding Fractions - Worksheet

Skill

Group A - Adding fractions with a common denominator

Work out the following. Simplify your answers:

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

2) $\frac{1}{8} + \frac{4}{8}$

3) $\frac{7}{8} + \frac{3}{8}$

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

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

6) $\frac{2}{4} + \frac{3}{4}$

7) $\frac{3}{7} + \frac{3}{7}$

8) $\frac{4}{5} + \frac{4}{5}$

9) $\frac{4}{7} + \frac{5}{7}$

10) $\frac{4}{9} + \frac{3}{9}$

11) $\frac{6}{5} + \frac{6}{5}$

12) $\frac{2}{9} + \frac{4}{9}$

Group B - Adding fractions with different denominators

Work out the following. Simplify your answers:

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

2) $\frac{2}{3} + \frac{1}{12}$

3) $\frac{2}{3} + \frac{1}{18}$

4) $\frac{2}{9} + \frac{1}{18}$

5) $\frac{4}{9} + \frac{2}{27}$

6) $\frac{4}{9} + \frac{1}{3}$

7) $\frac{1}{4} + \frac{1}{3}$

8) $\frac{1}{4} + \frac{1}{5}$

9) $\frac{1}{4} + \frac{2}{5}$

10) $\frac{1}{4} + \frac{3}{5}$

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

12) $\frac{2}{9} + \frac{2}{5}$

Group C - Adding mixed numbers

Work out the following. Simplify your answers:

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

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

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

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

5) $2\frac{1}{7} + 1\frac{1}{3}$

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

7) $2\frac{2}{9} + \frac{5}{6}$

8) $1\frac{5}{12} + 1\frac{5}{8}$

9) $3\frac{1}{10} + 2\frac{2}{3}$

10) $4\frac{8}{15} + 3\frac{1}{3}$

11) $2\frac{3}{8} + 3\frac{2}{3}$

12) $3\frac{1}{9} + 2\frac{2}{5}$

Adding Fractions - Worksheet

Applied

1) **(a)** From the list below, identify two fractions that add up to $1\frac{1}{8}$

$\frac{4}{8}$ $\frac{7}{8}$ $\frac{1}{4}$ $\frac{3}{4}$

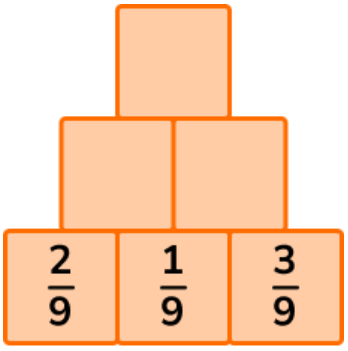
(b) Find the missing fraction.

$$\frac{4}{5} - \square = \frac{2}{5}$$

2) Laura has $\frac{10}{19}$ of a pizza and is given another $\frac{2}{19}$. How much pizza does she have now?

3) Lewis says $\frac{7}{11} + \frac{2}{3} = \frac{9}{14}$
Is he correct? Show how you made your decision.

4) Each pair of blocks adds to make the block above them.
Complete the pyramid.



5) Sarah made two types of cakes. She used $1\frac{5}{8}$ cups of sugar for one recipe and $2\frac{1}{4}$ cups of sugar for the other. How many cups of sugar did she use in total?

Adding Fractions - Exam Questions

1) **(a)** Work out $\frac{2}{5} + \frac{5}{12}$

Give your answer in its simplest form.

.....

(2)

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

Give your answer as a mixed number in its simplest form.

.....

(3)

(5 marks)

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2) Marcus is training for a triathlon. He swims three days in one week.

Marcus swims $1\frac{1}{2}$ miles on Monday.

Then he swims $1\frac{2}{3}$ miles on Thursday.

Finally he swims $2\frac{1}{5}$ miles on Sunday.

Work out how far Marcus swam in total.

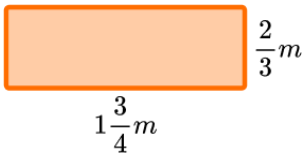
Give your answer as a mixed number in its simplest form.

.....miles

(3 marks)

Adding Fractions - Exam Questions

3) Find the perimeter of the rectangle below:



Give your answer as a mixed number in its simplest form.

.....m

(4 marks)

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4) Work out $\frac{3\pi}{8} + \frac{\pi}{5}$

Give your answer as a fraction in terms of π

.....

(2 marks)

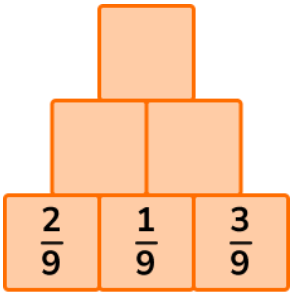
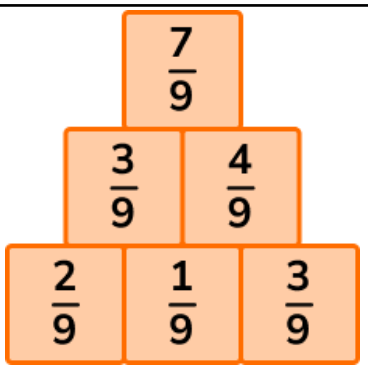
Adding Fractions - Answers

	Question	Answer
	Skill Questions	
Group A	Work out the following. Simplify your answers: **1)** $\frac{1}{8}+\frac{2}{8}$ **2)** $\frac{1}{8}+\frac{4}{8}$ **3)** $\frac{7}{8}+\frac{3}{8}$ **4)** $\frac{1}{4}+\frac{3}{4}$ **5)** $\frac{2}{4}+\frac{2}{4}$ **6)** $\frac{2}{4}+\frac{3}{4}$ **7)** $\frac{3}{7}+\frac{3}{7}$ **8)** $\frac{4}{5}+\frac{4}{5}$ **9)** $\frac{4}{7}+\frac{5}{7}$ **10)** $\frac{4}{9}+\frac{3}{9}$ **11)** $\frac{6}{5}+\frac{6}{5}$ **12)** $\frac{2}{9}+\frac{4}{9}$	**1)** $\frac{3}{8}$ **2)** $\frac{5}{8}$ **3)** $1\frac{1}{4}$ **4)** 1 **5)** 1 **6)** $1\frac{1}{4}$ **7)** $\frac{6}{7}$ **8)** $1\frac{3}{5}$ **9)** $1\frac{2}{7}$ **10)** $\frac{7}{9}$ **11)** $2\frac{2}{5}$ **12)** $\frac{2}{3}$
Group B	Work out the following. Simplify your answers: **1)** $\frac{2}{3}+\frac{1}{6}$ **2)** $\frac{2}{3}+\frac{1}{12}$ **3)** $\frac{2}{3}+\frac{1}{18}$ **4)** $\frac{2}{9}+\frac{1}{18}$ **5)** $\frac{4}{9}+\frac{2}{27}$ **6)** $\frac{4}{9}+\frac{1}{3}$ **7)** $\frac{1}{4}+\frac{1}{3}$ **8)** $\frac{1}{4}+\frac{1}{5}$ **9)** $\frac{1}{4}+\frac{2}{5}$ **10)** $\frac{1}{4}+\frac{3}{5}$ **11)** $\frac{1}{9}+\frac{3}{5}$ **12)** $\frac{2}{9}+\frac{2}{5}$	**1)** $\frac{5}{6}$ **2)** $\frac{3}{4}$ **3)** $\frac{13}{18}$ **4)** $\frac{5}{18}$ **5)** $\frac{14}{27}$ **6)** $\frac{7}{9}$ **7)** $\frac{7}{12}$ **8)** $\frac{9}{20}$ **9)** $\frac{13}{20}$ **10)** $\frac{17}{20}$ **11)** $\frac{32}{45}$ **12)** $\frac{28}{45}$

Adding Fractions - Answers

Group C	Work out the following. Simplify your answers: **1)** $1\frac{1}{2} + 1\frac{1}{3}$ **2)** $1\frac{1}{2} + 1\frac{1}{4}$ **3)** $1\frac{1}{2} + 1\frac{1}{5}$ **4)** $2\frac{1}{2} + 2\frac{1}{5}$ **5)** $2\frac{1}{7} + 1\frac{1}{3}$ **6)** $2\frac{1}{2} + 1\frac{1}{3}$ **7)** $2\frac{2}{9} + \frac{5}{6}$ **8)** $1\frac{5}{12} + 1\frac{5}{8}$ **9)** $3\frac{1}{10} + 2\frac{2}{3}$ **10)** $4\frac{8}{15} + 3\frac{1}{3}$ **11)** $2\frac{3}{8} + 3\frac{2}{3}$ **12)** $3\frac{1}{9} + 2\frac{2}{5}$	**1)** $2\frac{5}{6}$ **2)** $2\frac{3}{4}$ **3)** $2\frac{7}{10}$ **4)** $4\frac{7}{10}$ **5)** $3\frac{10}{21}$ **6)** $3\frac{5}{6}$ **7)** $3\frac{1}{18}$ **8)** $3\frac{1}{24}$ **9)** $5\frac{23}{30}$ **10)** $7\frac{13}{15}$ **11)** $6\frac{1}{24}$ **12)** $5\frac{23}{45}$

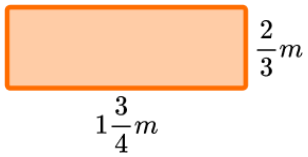
Adding Fractions - Answers

	Question	Answer
	Applied Questions	
1)	**a)** From the list below, identify two fractions that add up to $1\frac{1}{8}$. $\frac{4}{8}$ $\frac{7}{8}$ $\frac{1}{4}$ $\frac{3}{4}$ **b)** Find the missing fraction. $\frac{4}{5} - \square = \frac{2}{5}$	**a)** $\frac{7}{8}$ and $\frac{1}{4}$ add up to $1\frac{1}{8}$ **b)** $\frac{2}{5}$
2)	Laura has $\frac{10}{19}$ of a pizza and is given another $\frac{2}{19}$. How much pizza does she have now?	$\frac{12}{19}$
3)	Lewis says $\frac{7}{11} + \frac{2}{3} = \frac{9}{14}$. Is he correct? Show how you made your decision.	No. The answer should be $\frac{43}{33} = 1\frac{10}{33}$. He has added the numerator and denominator instead of finding a common denominator.
4)	Each pair of blocks adds to make the block above them. Complete the pyramid. 	
5)	Sarah made two types of cakes. She used $1\frac{5}{8}$ cups of sugar for one recipe and $2\frac{1}{4}$ cups of sugar for the other. How many cups of sugar did she use in total?	$\frac{31}{8} = 3\frac{7}{8}$

Adding Fractions - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	Work out $\frac{2}{5} + \frac{5}{12}$ Give your answer in its simplest form.	**(a)** Finding a common denominator, e.g. $\frac{24}{60} + \frac{25}{60}$ **(1)** $\frac{49}{60}$ **(1)**	**(2)**
(b)	Work out $1\frac{2}{5} + 2\frac{3}{4}$ Give your answer as a mixed number in its simplest form.	**(b)** Converting to improper fractions $\frac{7}{5} + \frac{11}{4}$ **(1)** Finding a common denominator, e.g. $\frac{28}{20} + \frac{55}{20}$ or $\frac{83}{20}$ **(1)** $4\frac{3}{20}$ **(1)**	**(3)**
2)	Marcus is training for a triathlon. He swims three days in one week. Marcus swims $1\frac{1}{2}$ miles on Monday. He swims $1\frac{2}{3}$ miles on Thursday. He swims $2\frac{1}{5}$ miles on Sunday. Work out how far Marcus swam in total. Give your answer as a mixed number in its simplest form.	$1\frac{1}{2} + 1\frac{2}{3} + 2\frac{1}{5}$ or $\frac{3}{2} + \frac{5}{2} + \frac{8}{5}$ seen **(1)** $\frac{161}{30}$ **(1)** $5\frac{11}{30}$ (miles) **(1)**	**(3)**

Adding Fractions - Mark Scheme

3)	Find the perimeter of the rectangle below.  Give your answer as a mixed number in its simplest form.	$1\frac{3}{4} + 1\frac{3}{4} + \frac{2}{3} + \frac{2}{3}$ or $\frac{7}{4} + \frac{7}{4} + \frac{2}{3} + \frac{2}{3}$ seen **(1)** Finding a common denominator **(1)** $\frac{29}{6}$ **(1)** $4\frac{5}{6}$ **(1)**	**(4)**
4)	Work out $\frac{3\pi}{8} + \frac{\pi}{5}$ Give your answer as a fraction in terms of π	$\frac{15\pi}{40} + \frac{8\pi}{40}$ **(1)** $\frac{23\pi}{40}$ **(1)**	**(2)**