Fractions - Worksheet

Skill

Group A - Equivalent fractions

Write these fractions in their simplest terms:

1) $\dfrac{30}{40}$

2) $\dfrac{32}{40}$

3) $\dfrac{36}{40}$

4) $\dfrac{15}{35}$

5) $\dfrac{20}{35}$

6) $\dfrac{21}{35}$

7) $\dfrac{10}{50}$

8) $\dfrac{25}{50}$

9) $\dfrac{45}{50}$

10) $\dfrac{12}{60}$

11) $\dfrac{18}{60}$

12) $\dfrac{45}{60}$

Group B - Fractions of amounts

Work out:

1) $\dfrac{1}{5}$ of 45

2) $\dfrac{3}{5}$ of 45

3) $\dfrac{4}{5}$ of 45

4) $\dfrac{1}{7}$ of 35

5) $\dfrac{4}{7}$ of 35

6) $\dfrac{5}{7}$ of 35

7) $\dfrac{1}{8}$ of 48

8) $\dfrac{3}{8}$ of 48

9) $\dfrac{5}{8}$ of 48

10) $\dfrac{1}{9}$ of 27

11) $\dfrac{2}{9}$ of 27

12) $\dfrac{5}{9}$ of 27

Fractions - Worksheet

Group C - Adding, subtracting, multiplying and dividing

Work out:

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

2) $\dfrac{3}{5} + \dfrac{1}{6}$

3) $\dfrac{2}{3} + \dfrac{3}{10}$

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

5) $\dfrac{3}{5} - \dfrac{1}{6}$

6) $\dfrac{2}{3} - \dfrac{3}{10}$

7) $\dfrac{1}{2} \times \dfrac{7}{9}$

8) $\dfrac{3}{7} \times \dfrac{4}{5}$

9) $\dfrac{2}{9} \times \dfrac{5}{7}$

10) $\dfrac{1}{2} \div \dfrac{7}{9}$

11) $\dfrac{3}{7} \div \dfrac{4}{5}$

12) $\dfrac{2}{9} \div \dfrac{5}{7}$

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

2

Fractions - Worksheet

Applied

1) Write these fractions in order of size:

(a) $\dfrac{1}{2}, \dfrac{3}{4}, \dfrac{2}{3}, \dfrac{5}{12}$

(b) $\dfrac{2}{3}, \dfrac{5}{8}, \dfrac{3}{4}, \dfrac{17}{24}$

2) Work out:

(a) $1\dfrac{2}{3} + 2\dfrac{1}{4}$

(b) $3\dfrac{5}{7} - 1\dfrac{2}{5}$

3) Work out:

(a) $1\dfrac{3}{5} \times 2\dfrac{2}{3}$

(b) $1\dfrac{2}{5} \div 2\dfrac{1}{2}$

4) **(a)** Clare earns £430 per week.

She spends $\dfrac{3}{5}$ of the money and saves the rest.

How much money does Clare save each week?

(b) Casey earns £34, 860 per year.

She spends $\dfrac{4}{7}$ of the money and saves the rest.

How much money does Casey save per year?

Fractions - Exam Questions

1)   Without a calculator. Work out.

Give your answer as a mixed number.

$$\frac{4}{7} + \frac{5}{6}$$

....

(3 marks)

---

2)   Without a calculator. Work out.

Give your answer as a mixed number.

$$7\frac{1}{4} \div 2\frac{2}{3}$$

....

(4 marks)

---

3)   Marty has a bookcase with only fiction
and non-fiction books.

$$\frac{2}{7}$$ of the books are non-fiction.

If there are 10 non-fiction books, how
many books are fiction?

....

(3 marks)

Fractions - Answers

	Question	Answer
Group A	Skill Questions	
	Write these fractions in their simplest terms: 1) $\dfrac{30}{40}$ 2) $\dfrac{32}{40}$ 3) $\dfrac{36}{40}$ 4) $\dfrac{15}{35}$ 5) $\dfrac{20}{35}$ 6) $\dfrac{21}{35}$ 7) $\dfrac{10}{50}$ 8) $\dfrac{25}{50}$ 9) $\dfrac{45}{50}$ 10) $\dfrac{12}{60}$ 11) $\dfrac{18}{60}$ 12) $\dfrac{45}{60}$	1) $\dfrac{3}{4}$ 2) $\dfrac{4}{5}$ 3) $\dfrac{9}{10}$ 4) $\dfrac{3}{7}$ 5) $\dfrac{4}{7}$ 6) $\dfrac{3}{5}$ 7) $\dfrac{1}{5}$ 8) $\dfrac{1}{2}$ 9) $\dfrac{9}{10}$ 10) $\dfrac{1}{5}$ 11) $\dfrac{3}{10}$ 12) $\dfrac{3}{4}$
Group B	Work out: 1) $\dfrac{1}{5}$ of 45 2) $\dfrac{3}{5}$ of 45 3) $\dfrac{4}{5}$ of 45 4) $\dfrac{1}{7}$ of 35	1) 9 2) 27 3) 36 4) 5

THIRD SPACE
LEARNING

Fractions - Answers

Group B		
	5) $\frac{4}{7}$ of 35	**5)** 20
	6) $\frac{5}{7}$ of 35	**6)** 25
	7) $\frac{1}{8}$ of 48	**7)** 6
	8) $\frac{3}{8}$ of 48	**8)** 18
	9) $\frac{5}{8}$ of 48	**9)** 30
	10) $\frac{1}{9}$ of 27	**10)** 3
	11) $\frac{2}{9}$ of 27	**11)** 6
	12) $\frac{5}{9}$ of 27	**12)** 15
Group C	Work out: **1)** $\frac{3}{4} + \frac{1}{5}$ **2)** $\frac{3}{5} + \frac{1}{6}$ **3)** $\frac{2}{3} + \frac{3}{10}$ **4)** $\frac{3}{4} - \frac{1}{5}$ **5)** $\frac{3}{5} - \frac{1}{6}$ **6)** $\frac{2}{3} - \frac{3}{10}$ **7)** $\frac{1}{2} \times \frac{7}{9}$ **8)** $\frac{3}{7} \times \frac{4}{5}$	**1)** $\frac{19}{20}$ **2)** $\frac{23}{30}$ **3)** $\frac{29}{30}$ **4)** $\frac{11}{20}$ **5)** $\frac{13}{30}$ **6)** $\frac{11}{30}$ **7)** $\frac{7}{18}$ **8)** $\frac{12}{35}$

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

6

Fractions - Answers

Group C	9) $\dfrac{2}{9} \times \dfrac{5}{7}$	9) $\dfrac{10}{63}$
	10) $\dfrac{1}{2} \div \dfrac{7}{9}$	10) $\dfrac{9}{14}$
	11) $\dfrac{3}{7} \div \dfrac{4}{5}$	11) $\dfrac{15}{28}$
	12) $\dfrac{2}{9} \div \dfrac{5}{7}$	12) $\dfrac{14}{45}$

THIRD SPACE
LEARNING

Fractions - Answers

	Question	Answer
	Applied Questions	
1)	Write these fractions in order of size: **(a)** $\dfrac{1}{2}, \dfrac{3}{4}, \dfrac{2}{3}, \dfrac{5}{12}$ **(b)** $\dfrac{2}{3}, \dfrac{5}{8}, \dfrac{3}{4}, \dfrac{17}{24}$	**(a)** $\dfrac{5}{12}, \dfrac{1}{2}, \dfrac{2}{3}, \dfrac{3}{4}$ **(b)** $\dfrac{5}{8}, \dfrac{2}{3}, \dfrac{17}{24}, \dfrac{3}{4}$
2)	Work out: **(a)** $1\dfrac{2}{3} + 2\dfrac{1}{4}$ **(b)** $3\dfrac{5}{7} - 1\dfrac{2}{5}$	**(a)** $3\dfrac{11}{12}$ **(b)** $2\dfrac{11}{35}$
3)	Work out: **(a)** $1\dfrac{3}{5} \times 2\dfrac{2}{3}$ **(b)** $1\dfrac{2}{5} \div 2\dfrac{1}{2}$	**(a)** $4\dfrac{4}{15}$ **(b)** $\dfrac{14}{25}$
4)	**(a)** Clare earns £430 per week. She spends $\dfrac{3}{5}$ of the money and saves the rest. How much money does Clare save each week? **(b)** Casey earns £34,860 per year. She spends $\dfrac{4}{7}$ of the money and saves the rest. How much money does Casey save per year?	**(a)** £172 **(b)** £14,940

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

8

Fractions - Mark Scheme

	Question	Answer	
	Exam Questions		
1)	Without a calculator. Work out. Give your answer as a mixed number. $\dfrac{4}{7} + \dfrac{5}{6}$	$=\dfrac{24}{42} + \dfrac{35}{42}$ **(1)** $=\dfrac{59}{42}$ **(1)** $=1\dfrac{17}{42}$ **(1)**	**(3)**
2)	Without a calculator. Work out. Give your answer as a mixed number. $7\dfrac{1}{4} \div 2\dfrac{2}{3}$	$=\dfrac{29}{4} \div \dfrac{8}{3}$ **(1)** $=\dfrac{29}{4} \times \dfrac{3}{8}$ **(1)** $=\dfrac{87}{32}$ **(1)** $=2\dfrac{23}{32}$ **(1)**	**(4)**
3)	Marty has a bookcase with only fiction and non-fiction books. $\dfrac{2}{7}$ of the books are non-fiction. If there are 10 non-fiction books, how many books are fiction?	$=\dfrac{2}{7} = \dfrac{10}{35}$ **(1)** $= 1-\dfrac{10}{35} = \dfrac{25}{35}$ **(1)** 25 fiction books **(1)**	**(3)**