Ordering Fractions - Worksheet

Skill

Group A - Ordering proper fractions

Write these fractions in ascending order:

1)
$$\frac{1}{3}$$
, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{5}{6}$

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

3)
$$\frac{1}{2}$$
, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{3}$

4)
$$\frac{3}{8}$$
, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$

5)
$$\frac{1}{6}$$
, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{5}$

6)
$$\frac{5}{6}$$
, $\frac{2}{3}$, $\frac{3}{8}$, $\frac{1}{2}$

7)
$$\frac{9}{10}$$
, $\frac{3}{8}$, $\frac{3}{5}$, $\frac{7}{10}$

8)
$$\frac{3}{7}$$
, $\frac{2}{3}$, $\frac{5}{6}$, $\frac{1}{3}$

9)
$$\frac{5}{9}$$
, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{7}{9}$

10)
$$\frac{2}{9}$$
, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{1}{2}$

11)
$$\frac{5}{6}$$
, $\frac{1}{7}$, $\frac{2}{7}$, $\frac{1}{3}$

12)
$$\frac{2}{5}$$
, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{5}$

Group B - Ordering improper fractions and mixed numbers

Write these fractions in ascending order:

1)
$$\frac{11}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

2)
$$1\frac{3}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

3)
$$\frac{3}{2}$$
, $\frac{5}{3}$, $\frac{13}{12}$

4)
$$\frac{7}{12}$$
, $1\frac{1}{2}$, $\frac{5}{3}$

5)
$$\frac{3}{2}$$
, $\frac{5}{3}$, $\frac{7}{6}$

6)
$$\frac{3}{2}$$
, $2\frac{1}{3}$, $\frac{7}{6}$

7)
$$\frac{2}{3}$$
, $\frac{7}{9}$, $\frac{5}{6}$, $\frac{11}{18}$

8)
$$\frac{3}{2}$$
, $1\frac{3}{7}$, $\frac{6}{5}$, $2\frac{1}{4}$

9)
$$\frac{1}{2}$$
, $1\frac{2}{7}$, $1\frac{1}{5}$, $\frac{3}{4}$

10) 5,
$$\frac{4}{5}$$
, $\frac{7}{8}$

11) 3,
$$\frac{7}{6}$$
, $\frac{7}{3}$

12) 3,
$$2\frac{5}{6}$$
, $\frac{7}{3}$

Group C - Ordering fractions and decimals

Write these fractions and decimals in ascending order:

1)
$$\frac{7}{10}$$
, 0.65, 1, $\frac{6}{10}$

2)
$$\frac{7}{8}$$
, 0.65, 1, $\frac{6}{8}$

3)
$$\frac{4}{8}$$
, 0.65, 1, $\frac{6}{8}$

4)
$$\frac{4}{8}$$
, 0.8, 1, $\frac{6}{8}$

5)
$$\frac{4}{5}$$
, 0.75, 1, $\frac{6}{5}$

6)
$$\frac{4}{5}$$
, 0.75, 1.25, $\frac{6}{5}$

7)
$$\frac{5}{8}$$
, 0.75, 1.25, $\frac{1}{8}$

8)
$$\frac{5}{8}$$
, $1\frac{1}{8}$, 1.25, $\frac{1}{8}$

9)
$$\frac{4}{5}$$
, 0.7, 0.88, $\frac{8}{9}$

10)
$$\frac{5}{4}$$
, 1.3, $\frac{4}{3}$, $\frac{9}{8}$

11)
$$\frac{5}{4}$$
, 0.7, 0.88, $\frac{8}{9}$

12) 1. 22, 1. 3,
$$\frac{4}{3}$$
, $\frac{9}{8}$



Ordering Fractions - Worksheet

Applied

1) Which of the following fractions is nearest to $\frac{7}{10}$? Show your working.

$$\frac{5}{8}$$
, $\frac{3}{4}$, $\frac{11}{20}$, $\frac{3}{5}$

Work out the median of the following set of numbers:

$$\frac{1}{3}$$
, $\frac{2}{5}$, $\frac{1}{4}$, $\frac{3}{10}$, $\frac{3}{20}$

- Here are two fractions: $\frac{7}{6}$, $\frac{6}{7}$. Work out which fraction is closer to 1. Show your working.
- 4) Here are two fractions: $\frac{3}{10}$, $\frac{5}{7}$. Work out which fraction is closer to $\frac{1}{2}$. Show your working.



Ordering Fractions - Exam Questions

1) (a) Write the following fractions in order of size. Start with the smallest fraction.

$$\frac{1}{6}$$
, $\frac{4}{15}$, $\frac{1}{5}$, $\frac{1}{3}$, $\frac{7}{30}$

(2)

(b) Find the median.

(1)

(3 marks)

2) Arrange these fractions in order, smallest first.

$$\frac{2}{3}$$
, $\frac{7}{9}$, $\frac{5}{6}$, $\frac{11}{18}$

(2 marks)

3) (a) Convert 0. 12 into a fraction.

.....(1)

(b) Convert 0. 15 into a fraction.

(1)



Ordering Fractions - Exam Questions

(c) Write these numbers in ascending order.

$$\frac{1}{2}$$
, 0.12, $\frac{1}{5}$, 0.15



(4 marks)

4) (a) Write these numbers in ascending order.

$$0.28, \frac{3}{25}, 0.32, \frac{2}{5}, \frac{3}{10}$$

(2)

(b) Find the median.

(1)

(3 marks)



	Question	Answer
	Skill Questions	
Group A	Write these fractions in ascending order:	
	1) $\frac{1}{3}$, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{5}{6}$	1) $\frac{1}{4}$, $\frac{1}{3}$, $\frac{3}{4}$, $\frac{5}{6}$
	$2) \frac{1}{4}, \frac{1}{2}, \frac{5}{8}, \frac{3}{4}$	2) $\frac{1}{4}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$
	3) $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{3}$	3) $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{2}{3}$
	4) $\frac{3}{8}$, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$	4) $\frac{1}{3}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{2}{3}$
	5) $\frac{1}{6}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{5}$	5) $\frac{1}{6}$, $\frac{1}{5}$, $\frac{1}{3}$, $\frac{2}{3}$
	6) $\frac{5}{6}$, $\frac{2}{3}$, $\frac{3}{8}$, $\frac{1}{2}$	6) $\frac{3}{8}$, $\frac{1}{2}$, $\frac{2}{3}$, $\frac{5}{6}$
	7) $\frac{9}{10}$, $\frac{3}{8}$, $\frac{3}{5}$, $\frac{7}{10}$	7) $\frac{3}{8}$, $\frac{3}{5}$, $\frac{7}{10}$, $\frac{9}{10}$
	8) $\frac{3}{7}$, $\frac{2}{3}$, $\frac{5}{6}$, $\frac{1}{3}$	8) $\frac{1}{3}$, $\frac{3}{7}$, $\frac{2}{3}$, $\frac{5}{6}$
	9) $\frac{5}{9}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{7}{9}$	9) $\frac{1}{3}$, $\frac{1}{2}$, $\frac{5}{9}$, $\frac{7}{9}$
	10) $\frac{2}{9}$, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{1}{2}$	10) $\frac{2}{9}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{2}{3}$
	11) $\frac{5}{6}$, $\frac{1}{7}$, $\frac{2}{7}$, $\frac{1}{3}$	11) $\frac{1}{7}$, $\frac{2}{7}$, $\frac{1}{3}$, $\frac{5}{6}$
	12) $\frac{2}{5}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{5}$	12) $\frac{2}{5}$, $\frac{1}{2}$, $\frac{3}{5}$, $\frac{3}{4}$



Group B

Write these fractions and decimals in ascending order:

1)
$$\frac{11}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

2)
$$1\frac{3}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

3)
$$\frac{3}{2}$$
, $\frac{5}{3}$, $\frac{13}{12}$

4)
$$\frac{7}{12}$$
, $1\frac{1}{2}$, $\frac{5}{3}$

5)
$$\frac{3}{2}$$
, $\frac{5}{3}$, $\frac{7}{6}$

6)
$$\frac{3}{2}$$
, $2\frac{1}{3}$, $\frac{7}{6}$

7)
$$\frac{2}{3}$$
, $\frac{7}{9}$, $\frac{5}{6}$, $\frac{11}{18}$

8)
$$\frac{3}{2}$$
, $1\frac{3}{7}$, $\frac{6}{5}$, $2\frac{1}{4}$

9)
$$\frac{1}{2}$$
, $1\frac{2}{7}$, $1\frac{1}{5}$, $\frac{3}{4}$

10) 5,
$$\frac{4}{5}$$
, $\frac{7}{8}$

11) 3,
$$\frac{7}{6}$$
, $\frac{7}{3}$

12) 3,
$$2\frac{5}{6}$$
, $\frac{7}{3}$

1)
$$\frac{11}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

2)
$$1\frac{3}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

3)
$$\frac{13}{12}$$
, $\frac{3}{2}$, $\frac{5}{3}$

4)
$$\frac{7}{12}$$
, $1\frac{1}{2}$, $\frac{5}{3}$

5)
$$\frac{7}{6}$$
, $\frac{3}{2}$, $\frac{5}{3}$

6)
$$\frac{7}{6}$$
, $\frac{3}{2}$, $2\frac{1}{3}$

7)
$$\frac{11}{18}$$
, $\frac{2}{3}$, $\frac{7}{9}$, $\frac{5}{6}$

8)
$$\frac{6}{5}$$
, $1\frac{3}{7}$, $\frac{3}{2}$, $2\frac{1}{4}$

9)
$$\frac{1}{2}$$
, $\frac{3}{4}$, $1\frac{1}{5}$, $1\frac{2}{7}$

10)
$$\frac{4}{5}$$
, $\frac{7}{8}$, 5

11)
$$\frac{7}{6}$$
, $\frac{7}{3}$, 3

12)
$$\frac{7}{3}$$
, $2\frac{5}{6}$, 3



Group C

Write these fractions and decimals in ascending order:

1)
$$\frac{7}{10}$$
, 0.65, 1, $\frac{6}{10}$

2)
$$\frac{7}{8}$$
, 0.65, 1, $\frac{6}{8}$

3)
$$\frac{4}{8}$$
, 0.65, 1, $\frac{6}{8}$

4)
$$\frac{4}{8}$$
, 0.8, 1, $\frac{6}{8}$

5)
$$\frac{4}{5}$$
, 0.75, 1, $\frac{6}{5}$

6)
$$\frac{4}{5}$$
, 0.75, 1.25, $\frac{6}{5}$

7)
$$\frac{5}{8}$$
, 0.75, 1.25, $\frac{1}{8}$

8)
$$\frac{5}{8}$$
, $1\frac{1}{8}$, 1.25, $\frac{1}{8}$

9)
$$\frac{4}{5}$$
, 0.7, 0.88, $\frac{8}{9}$

10)
$$\frac{5}{4}$$
, 1.3, $\frac{4}{3}$, $\frac{9}{8}$

11)
$$\frac{5}{4}$$
, 0.7, 0.88, $\frac{8}{9}$

12) 1. 22, 1. 3,
$$\frac{4}{3}$$
, $\frac{9}{8}$

1)
$$\frac{6}{10}$$
, 0.65, $\frac{7}{10}$, 1

2) 0.65,
$$\frac{6}{8}$$
, $\frac{7}{8}$, 1

3)
$$\frac{4}{8}$$
, 0.65, $\frac{6}{8}$, 1

4)
$$\frac{4}{8}$$
, $\frac{6}{8}$, 0.8, 1

5) 0. 75,
$$\frac{4}{5}$$
, 1, $\frac{6}{5}$

6) 0.75,
$$\frac{4}{5}$$
, $\frac{6}{5}$, 1.25

7)
$$\frac{1}{8}$$
, $\frac{5}{8}$, 0.75, 1.25

8)
$$\frac{1}{8}$$
, $\frac{5}{8}$, $1\frac{1}{8}$, 1.25

9) 0.7,
$$\frac{4}{5}$$
, 0.88, $\frac{8}{9}$

10)
$$\frac{9}{8}$$
, $\frac{5}{4}$, 1.3, $\frac{4}{3}$

11) 0. 7, 0. 88,
$$\frac{8}{9}$$
, $\frac{5}{4}$

12)
$$\frac{9}{8}$$
, 1.22, 1.3, $\frac{4}{3}$



	Question	Answer
	Applied Questions	
1)	Which of the following fractions is nearest to $\frac{7}{10}$? Show your working. $\frac{5}{8}$, $\frac{3}{4}$, $\frac{11}{20}$, $\frac{3}{5}$	$\frac{\frac{3}{4}}{\frac{7}{10}} = 0.7$ $\frac{\frac{5}{8}}{8} = 0.625$ $\frac{\frac{3}{4}}{4} = 0.75$ $\frac{\frac{11}{20}}{6} = 0.55$ $\frac{\frac{3}{5}}{6} = 0.6$
2)	Work out the median of the following set of numbers: $\frac{1}{3}, \frac{2}{5}, \frac{1}{4}, \frac{3}{10}, \frac{3}{20}$	$\frac{\frac{3}{10}}{\frac{1}{3}} = \frac{20}{60} = 0.3333$ $\frac{\frac{2}{5}}{\frac{5}{60}} = \frac{24}{60} = 0.4$ $\frac{\frac{1}{4}}{\frac{1}{4}} = \frac{\frac{15}{60}}{\frac{15}{60}} = 0.25$ $\frac{\frac{3}{10}}{\frac{1}{20}} = \frac{\frac{18}{60}}{\frac{1}{60}} = 0.3$ $\frac{\frac{3}{20}}{\frac{1}{20}} = \frac{\frac{9}{60}}{\frac{1}{60}} = 0.15$
3)	Here are two fractions: $\frac{7}{6}$, $\frac{6}{7}$. Work out which fraction is closer to 1. Show your working.	$\frac{\frac{6}{7}}{\frac{6}{7}} = \frac{\frac{36}{42}}{\frac{42}{42}}, \frac{\frac{6}{42}}{\frac{42}{42}}$ away from 1 $\frac{\frac{7}{6}}{\frac{6}{42}} = \frac{\frac{49}{42}}{\frac{42}{42}}$, $\frac{\frac{7}{42}}{\frac{42}{42}}$ away from 1
4)	Here are two fractions: $\frac{3}{10}$, $\frac{5}{7}$. Work out which fraction is closer to $\frac{1}{2}$. Show your working.	$\frac{\frac{3}{10}}{\frac{1}{2}} = \frac{35}{70}$ $\frac{\frac{3}{10}}{\frac{1}{0}} = \frac{21}{70}, \frac{14}{70} \text{ away from } \frac{1}{2}$ $\frac{5}{7} = \frac{50}{70}, \frac{15}{70} \text{ away from } \frac{1}{2}$



Ordering Fractions - Mark Scheme

		Question	Answer		
		Exam Questions			
1)	(a)	Write the following fractions in order of size. Start with the smallest fraction.	(a) $\frac{5}{30}$, $\frac{8}{30}$, $\frac{6}{30}$, $\frac{10}{30}$, $\frac{7}{30}$ Any 2 correct conversions	(1)	
		$\frac{1}{6}$, $\frac{4}{15}$, $\frac{1}{5}$, $\frac{1}{3}$, $\frac{7}{30}$	$\frac{1}{6}$, $\frac{1}{5}$, $\frac{7}{30}$, $\frac{4}{15}$, $\frac{1}{3}$	(1)	
	(b)	Find the median.	(b) $\frac{7}{30}$	(1)	
2)		Arrange these fractions in order, smallest first. $\frac{2}{3}$, $\frac{7}{9}$, $\frac{5}{6}$, $\frac{11}{18}$	$\frac{12}{18}$, $\frac{14}{18}$, $\frac{15}{18}$, $\frac{11}{18}$ Any 2 correct conversions $\frac{11}{18}$, $\frac{2}{3}$, $\frac{7}{9}$, $\frac{5}{6}$	(1)	
3)	(a)	Convert 0. 12 into a fraction.	(a) $\frac{12}{100}$ or equivalent e.g., $\frac{6}{50}$, $\frac{3}{25}$	(1)	
	(b)	Convert 0. 15 into a fraction.	(b) $\frac{15}{100}$ or equivalent e.g., $\frac{3}{20}$	(1)	
	(c)	Write these numbers in ascending order. $\frac{1}{2}$, 0.12, $\frac{1}{5}$, 0.15	(c) Correct conversion for $\frac{1}{2}$ or $\frac{1}{5}$, e.g., $\frac{50}{100}$ or $\frac{20}{100}$ or 0.5 or 0.2	(1)	
			$0.12, 0.15, \frac{1}{5}, \frac{1}{2}$	(1)	
4)	(a)	Write these numbers in ascending order. 0. 28, $\frac{3}{25}$, 0. 32, $\frac{2}{5}$, $\frac{3}{10}$	(a) $\frac{28}{100}$, $\frac{12}{100}$, $\frac{32}{100}$, $\frac{40}{100}$, $\frac{30}{100}$ Any 2 correct conversions $\frac{3}{25}$, 0. 28, $\frac{3}{10}$, 0. 32, $\frac{2}{5}$	(1) (1)	
	(b)	Find the median.	(b) $\frac{3}{10}$	(1)	

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