



**THIRD SPACE
LEARNING**

Word Problems

**11 fractions and decimals
questions to develop reasoning
and problem solving skills**

Grade 4

Questions

Name:

Date:

- 1 Oliver is using colored string for an art project. He used $\frac{3}{4}$ yard of blue string, $\frac{7}{8}$ yard of red string, and $\frac{5}{6}$ yard of green string. Use benchmark fractions and number lines to arrange the lengths of string in order from shortest to longest.



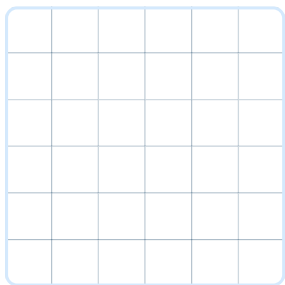
Answer

- 2 There are 150 boxes that need to be moved. Jayden moved $\frac{1}{3}$ of the boxes. Ishaan moved $\frac{2}{5}$ of the boxes. How many more boxes did Ishaan move than Jayden?

Answer

3 Using this grid, can you shade and write:

a A fraction equivalent to $\frac{1}{2}$?



b A fraction equivalent to $\frac{1}{4}$?



4 Kia says that $\frac{7}{2}$ can be written as a multiple of a unit fraction. Is she correct? Explain your answer.

Answer

5 Colin spent some time working on his math homework. He then spent $\frac{5}{12}$ of an hour working on his Spanish homework. Colin spent 1 hour on homework. What fraction of an hour did Colin spend on math? Explain how you got your answer.

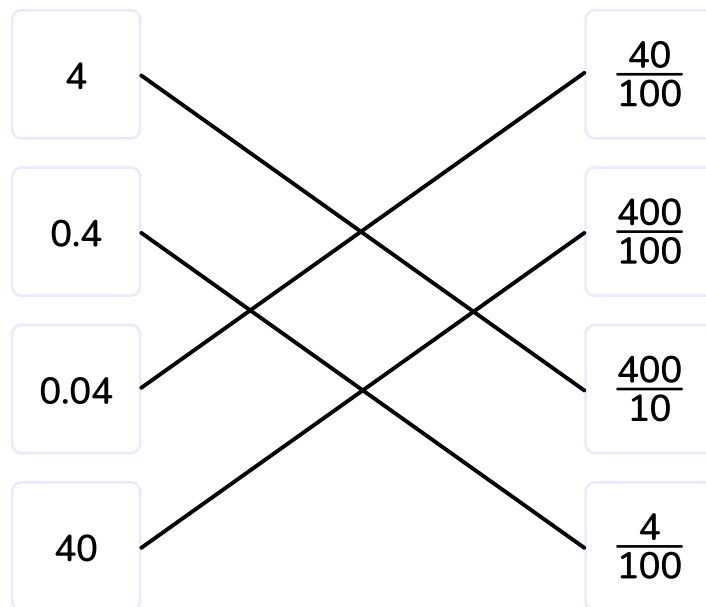
Answer

Word Problems | Grade 4 | Fractions and Decimals

- 6 Adriano had $5\frac{1}{6}$ feet of wire. He used some wire to make a school project. Now he has $\frac{14}{6}$ feet of wire left. How much wire did Adriano use?

Answer

- 7 In class, Sioban matched the decimal to the equivalent fraction. Look at how she matched the numbers and explain if she is correct.



- 8 Hillary and Annie are reading the same book. It has 680 pages. Hillary has got of $\frac{2}{5}$ the way through. Annie has got $\frac{7}{10}$ of the way through. Who has read more pages?

Answer

- 9 Use the table to plot the points on the number line.

Point	Value
A	3.1
B	3.9
C	3.4



- 10 Complete the comparison statements with $<$, $>$, or $=$

a 0.52 0.5

b 0.60 0.6

c 0.75 0.08

d 0.81 0.80

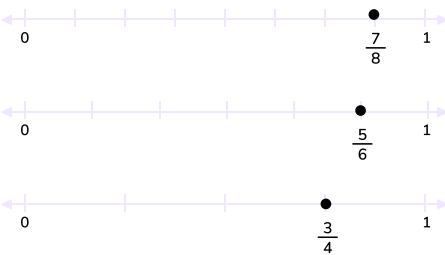
Challenge Question!

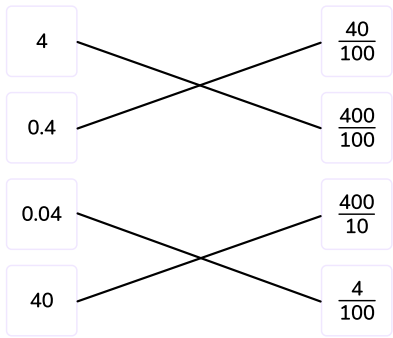
Sienna practices the flute Monday, Wednesday, and Friday for $\frac{1}{2}$ hour each day. She also practices the piano every Tuesday and Thursday for $\frac{3}{4}$ hour each day. How many hours does Sienna spend practicing musical instruments each week?

Answer



Answers

Question number	Question	Answers	Standard
1	Oliver is using colored string for an art project. He used $\frac{3}{4}$ yard of blue string, $\frac{7}{8}$ yard of red string, and $\frac{5}{6}$ yard of green string. Use benchmark fractions and number lines to arrange the lengths of string in order from shortest to longest.	$\frac{3}{4}$ $\frac{5}{6}$ $\frac{7}{8}$ 	4.NF.A.1
2	How many more boxes did Ishaan move than Jayden?	$\frac{1}{3} \times 150 = \frac{150}{3} = 50$ Jayden moved 50 boxes. $\frac{2}{5} \times 150 = \frac{300}{5} = 60$ Ishaan moved 60 boxes $60 - 50 = 10$ Ishaan moved 10 more boxes than Jayden.	4.NF.B.4
3	Using this grid, can you shade and write: a) A fraction equivalent to $\frac{1}{2}$? b) A fraction equivalent to $\frac{1}{4}$?	a) They should have shaded in 18 squares $\frac{1}{2} = \frac{18}{36}$ b) They should have shaded in 9 squares $\frac{1}{4} = \frac{9}{36}$	4.NF.A.1
4	Kia says that $\frac{7}{2}$ can be written as a multiple of a unit fraction. Is she correct? Explain your answer.	$\frac{7}{2}$ can be rewritten as a multiple of a unit fraction. $\frac{1}{2}$ is a unit fraction and when multiplied by 7 it is $\frac{7}{2}$. $7 \times \frac{1}{2}$ $\frac{7}{2} \times \frac{1}{2} = \frac{7}{2}$	4.NF.B.4a

Question number	Question	Answers	Standard
5	What fraction of an hour did Colin spend on math? Explain how you got your answer.	$\frac{7}{12}$ of an hour working on math. In order to make a whole from $\frac{5}{12}$ you would need to add $\frac{7}{12}$ to it. $\frac{5}{12} + \frac{7}{12} = \frac{12}{12} = 1$ Or you can look at it as one hour minus $\frac{5}{12}$. $1 - \frac{5}{12} = \frac{7}{12}$ $\frac{12}{12} - \frac{5}{12} = \frac{7}{12}$	4.NF.B.3d
6	How much wire did Adriano use?	$5 \frac{1}{6} - \frac{14}{6}$ $\frac{31}{6} - \frac{14}{6} = \frac{17}{6} = 2 \frac{5}{6}$ Adriano used $2 \frac{5}{6}$ feet of wire.	4.NF.B.3c
7	In class, Sioban matched the decimal to the equivalent fraction. Look at how she matched the numbers and explain if she is correct.	Sioban is not correct with any of her matches. The correct matched pairs is this: 	4.NF.C.6

Question number	Question	Answers	Standard
8	Who has read more pages?	$\frac{2}{5} \times 680 = \frac{1360}{5} = 272$ Hilary has read 272. $\frac{7}{10} \times 680 = \frac{4760}{10} = 476$ Annie has read 476.	4.NF.B.4c
9	Use the table to plot the points on the number line. A: 3.1 B: 3.9 C: 3.4		4.NF.C.6
10	Complete the comparison statements with <, >, or =	a) $0.52 > 0.5$ b) $0.60 = 0.6$ c) $0.75 > 0.08$ d) $0.81 > 0.80$	4.NF.C.7
Challenge Question	How many hours does Sienna spend practicing musical instruments each week?	3 hours a week.	4.NF.B.3c 4.NF.B.4c

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