

Orders Fractions

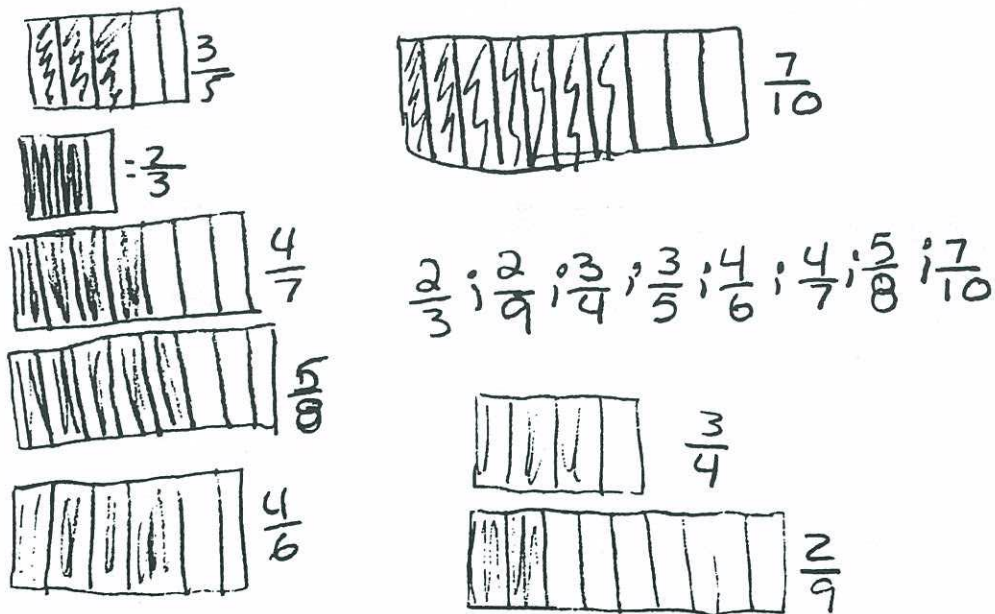


Competency: Student orders fractions.

Description of the Task: Place the following fractions in increasing order. Explain or show your work. (Explain why you have chosen to place the fractions in that order.)

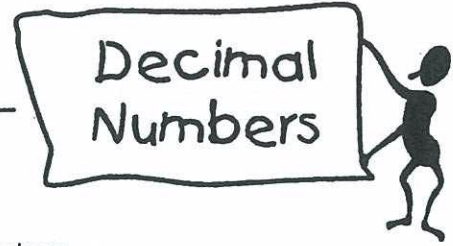
$\frac{3}{5}$	$\frac{2}{3}$	$\frac{4}{7}$	$\frac{5}{8}$	$\frac{4}{6}$	$\frac{3}{4}$	$\frac{2}{9}$	$\frac{7}{10}$
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MID-GRADE 7 LEVEL OF PERFORMANCE



Rationale for Assigned Level:

Possible Next Steps:



Competency: Student orders decimal numbers.

Description of the Task: Given the following three sets of numbers:

A)	<p>0.35</p> <p>0.47</p> <p>0.3</p>	B)	<p>0.5</p> <p>1.07</p> <p>1.24</p>	C)	<p>0.759</p> <p>1.105</p> <p>1.098</p>
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i. Place the numbers in each set in ascending order.

A) _____ B) _____ C) _____

ii. Place any seven of the numbers in ascending order.

MID-GRADE 7 LEVEL OF PERFORMANCE

A)	<p>0.35</p> <p>0.47</p> <p>0.3</p>	B)	<p>0.5</p> <p>1.07</p> <p>1.24</p>	C)	<p>0.759</p> <p>1.105</p> <p>1.098</p>
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i. Place the numbers in each set in ascending order.

A) 0.47 0.35 0.3 B) 0.5 1.07 1.24 C) 0.759 1.098 1.105

ii. Place any seven of the numbers in ascending order.

0.47 0.35 0.3 0.5 1.07 1.24 1.098

Rationale for Assigned Level:

Possible Next Steps:

Representing Numbers

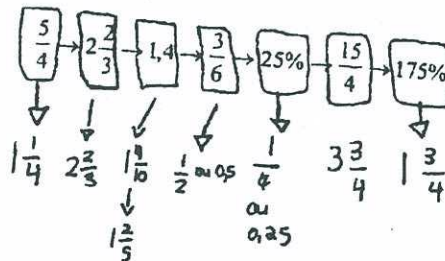


Competency: Student understands that a given number may be represented in a variety of ways.

Description of the Task: Place the fractions represented by the following numbers in increasing order.

$$\frac{5}{4}, 2\frac{2}{3}, 1.4, \frac{3}{6}, 25\%, \frac{15}{4}, 175\%$$

MID-GRADE 7 LEVEL OF PERFORMANCE



$$25\% < \frac{1}{2} < 1\frac{1}{4} < 1\frac{4}{10} < 1\frac{3}{4} < 2\frac{2}{3} < 3\frac{3}{4}$$

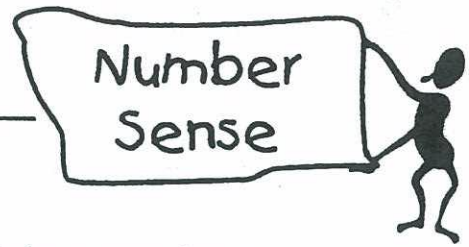
- I compare $1\frac{1}{4}$, $1\frac{4}{10}$, $1\frac{3}{4}$ because they all have 1 and a part of a whole.

$$\begin{array}{ccc} \frac{1}{4} & \frac{4}{10} & \frac{3}{4} \\ 0.25 & 0.4 & 0.75 \end{array}$$

- $2\frac{2}{3} < 3\frac{3}{4}$

Rationale for Assigned Level:

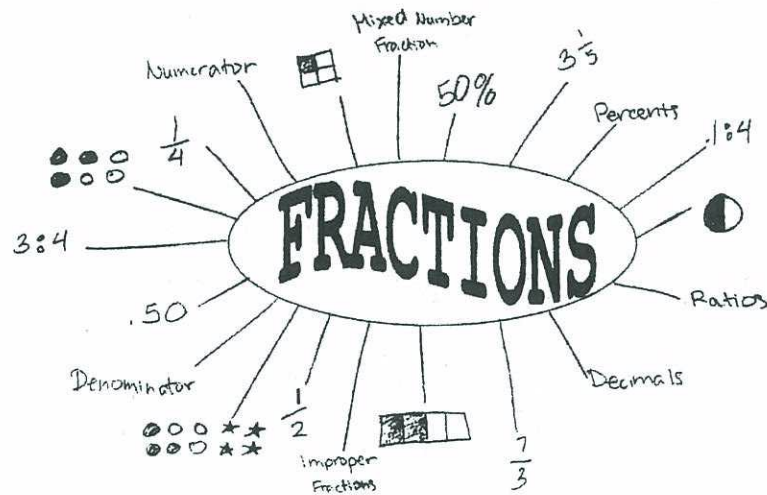
Possible Next Steps:



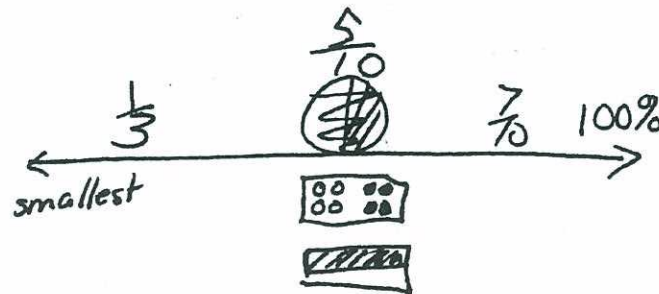
Some questions may yield information relative to more than one competency. Here is an example of one such question:

Competency: Student orders fractions. Student orders decimals.
 Student understands that a given number may be represented in a variety of ways.

Description of the Task: Choose at least five representations from the examples below. Place in order from smallest to greatest value.

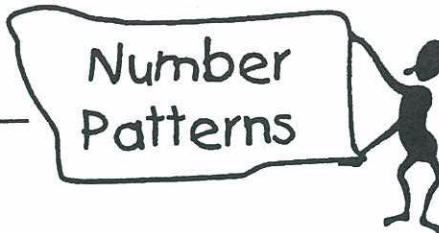


MID-GRADE 7 LEVEL OF PERFORMANCE



Rationale for Assigned Level:

Possible Next Steps:



Competency: Student uses number patterns to solve mathematical problems.

Description of the Task: To construct a fence, Claudia has used posts connected with two boards.



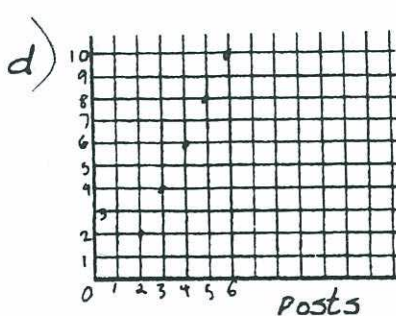
- Extend Claudia's fence by adding two more posts and the necessary boards.
- Construct a table to show the relation between the number of posts and the number of boards.
- Predict the number of boards she will need to construct a fence with 10 posts, with 100 posts. Explain, in your own words, how you got your answers.
- Draw a graph to show the relation between the number of posts and the number of boards.
- Find an algebraic equation that will allow you to find the number of boards needed to construct a fence having any number of posts.

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a) C: 18, 198 I have multiplied the number of boards by 2 and then subtracted 2 to get the number of boards.

b)

Posts	Boards
1	0
2	2
3	4
4	6
5	8
6	10



e) $2a - 2 = b$
 $P = \text{Posts}$
 $B = \text{Boards}$

Rationale for Assigned Level:

Possible Next Steps: