(8 pts)1. Use these pieces that indicate 1.36 to show the use of the sharing method to complete the problem  $1.36 \div 4$ . Clearly show any decomposing that is necessary.

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(8 pts)2. A student showed the following work for the problem  $280 \div 35$ : Use this same method to do the problem  $270 \div 45$ .

280 -70 210 -70 140 -70 70 -70 0

So four 70s is eight 35s.

(8 pts)3. Multiply  $4.7 \times 2.3$ , showing all partial products.

(8 pts)4. Using the bar, draw a strip diagram to represent 21 is 35% of some number, *N*. Do not find or write the value of *N*. Put enough detail in your diagram so that a young student could easily determine the value of *N*.

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(8 pts)5. Show your thinking to estimate:

a) 23% of 87,922

b) the sale price of a chair originally priced \$151.33 with a "20% off" tag

(8 pts)6. Rewrite this problem in scientific notation; multiply using scientific notation format; and write your answer in scientific notation.

 $230,\!000 \times 0.000000081$ 

			Answer:	
(7 pts)7. Shown below is 1	$\frac{3}{4}$ yards of carpet. I	Draw pictures to rep	resent 1 yard of carp	et and $2\frac{1}{3}$ yards of
carpet, respectively per yard?	y. If the piece of ca	rpet shown sells for	\$31.50, what is the c	cost of the carpet
1 3				
1 yard:				
$2\frac{1}{3}$ yards:				
Cost of 1 yard of carpe	t:			

smaller

(9 pts)8. Circle the larger number in each pair. Give a brief explanation of your thinking.

- a)  $\frac{123}{240}$  and  $\frac{35}{70}$
- b)  $\frac{91}{120}$  and  $\frac{59}{80}$
- c)  $\frac{25}{101}$  and  $\frac{40}{159}$

(8 pts)9. Change each decimal to its simplified fraction equivalent. Show all steps of your work.

a) 0.042

b) 0.<del>36</del>

(8 pts)10. With the denominator given, write one fraction that is close to, but larger than, the given fraction and one fraction that is close to, but smaller than, the given fraction.

larger

- a)  $\frac{2}{5}$ , denominator 180
- b)  $\frac{1}{6}$ , denominator 72