Compatible Multiples

You need ☑ a classmate

Activity

Kim-Ly and Nio have several fraction and decimal-place problems to solve.
They try the first one: 5 x 15 x 0.2

Numbers are compatible if they multiply together to make a number that's easy to use. 5 and 0.2 are compatible. They multiply to make a whole number, 1.

1. Solve the problems below, using compatible numbers to make them easier. Explain what you did by showing your working as in Kim-Ly's example.

a.	5 x 7 x 0.2	b.	0.5 x 31 x 4	c.	1.5 x 18 x 2
d.	7 x 0.25 x 4	e.	$\frac{1}{3}$ x 7 x 3	f.	$\frac{1}{2}$ x 37 x 20
g.	18 x 34 x $\frac{1}{9}$	h.	8 x 125 x $\frac{1}{4}$	i.	13 x $\frac{1}{7}$ x 14
j.	23 x $\frac{1}{6}$ x 18	k.	15 x 0.25 x 0.2 x 8	l.	$\frac{1}{8}$ x 25 x 16 x $\frac{1}{5}$

2. Think of 10 sets of numbers that would multiply together to make 2. Include some fractions and some decimals.

3. Make up four problems that include decimals and fractions and can be solved by finding compatible numbers.
Give them to a classmate to solve.

4. Now make up a decimal multiplication problem and a fraction multiplication problem that use compatible numbers and have 20 as the solution. Compare your problems with a classmate's.