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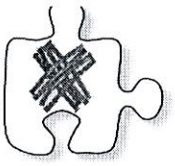
6.1.2 What does it mean to divide?



Fractions as Division Problems

6-15. One of the students in Ms. Yu's class exclaimed, "Whoa! We divided 7 pieces of licorice among 5 people and each person got 1 whole piece and $\frac{2}{5}$ of another. That's $\frac{7}{5}$ of a whole. Is this just a coincidence?"

a) With your team, come up with a visual that could represent 7 divided by 5.

b) Does it make sense that the answer to 7 divided by 5 is $\frac{7}{5}$? Explain.

c) Division problems can also be solved using long divison. What result do you get when use long division to solve $7 \div 5$?

6-16. Ms. Yu's students decided to explore this idea using smaller numbers and asked, *"What if 4 pieces of licorice were shared among 3 people?"*

a) Create a visual that shows how much licorice would each person get?

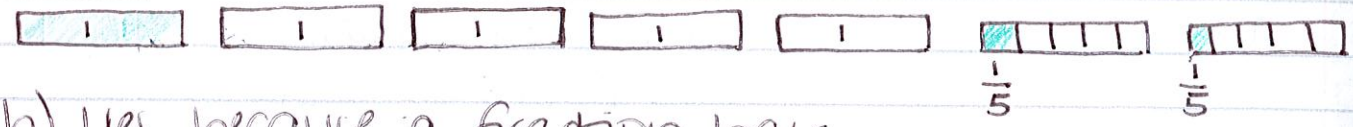
b) How much licorice will each person get? Can you write your answer in more than one way?

6-19. Lalo said to his team, "Division problems often result in fractions. Since all fractions represent division, I think we can write all fractions as division problems.

For each fraction below, write a division number sentence that matches.

a) $\frac{23}{8}$ b) $\frac{18}{25}$ c) $\frac{7}{20}$

6-15 a) $7 \div 5 = \frac{7}{5} = 1\frac{2}{5}$

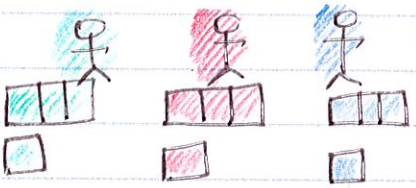


b) yes, because a fraction bar and division symbol mean the same thing

c) $5\overline{)7.000} \rightarrow 5\overline{)7.000}$ $\times 1.4$, $-5\downarrow$, 20 $= 1.4$

Setting up long division: top goes in, bottom out

6-16 a) $4 \div 3 = \frac{4}{3} = 1\frac{1}{3}$



b) Each person gets 4/3 or 1 1/3 pieces of licorice.

6-19 a) $\frac{23}{8}$ $23 \div 8$

b) $\frac{18}{25}$ $18 \div 25$

c) $\frac{7}{20}$ $7 \div 20$