Fraction exam practice:

Problems from the first quiz topics that might be on the exam:

1. If [picture] shows 1 whole, how much shows 2/3?

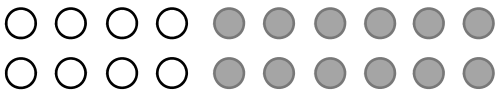
2. Give good (complete) comparison answers using an appropriate choice of the strategies we have been studying (same denominator, same numerator, transitive or residual). You do not need to give the name of your strategy.

a. $\frac{3}{8}$ and $\frac{3}{10}$ b $\frac{3}{8}$ and $\frac{5}{8}$

3. How do we know that fifteenths are bigger than sixteenths?

Problems from the second quiz topics that might be on the exam:

4. Explain how to show $\frac{12}{20}=\frac{3}{5}$ using this discrete model:



5. a. Explain how to convert $3\frac{2}{5}$ into an improper fraction (in a way that makes sense of the value of a whole)

b. Explain how to convert $\frac{11}{4}$ into a mixed numbers(in a way that makes sense of the value of a whole)

6. Explain how to add $\frac{2}{3}+\frac{3}{4}$ by making a visual model and multiplying

(for example: you could use fractions squares to show the fractions and visually find equivalent fractions with the same denominator by splitting; then use the fraction squares to explain how to find the numerical value of the equivalent fractions by multiplying)

7. Explain how to show $\frac{2}{3}=\frac{8}{12}$ by splitting on a number line.

New questions

8. Write a word problem for $\frac{7}{8}-\frac{2}{3}$ 9. Write a word problem for $\frac{3}{4}+\frac{5}{6}$

10. Write a word problem for $\frac{3}{4}\times\frac{5}{6}$ 11. Write a partitive word problem for $\frac{3}{4}\div\frac{2}{3}$

12. Write a measurement word problem for $\frac{7}{8}\div\frac{1}{3}$

13. Show how to solve $\frac{3}{4}\times\frac{5}{6}$ using a square area diagram. Explain how to get the multiplication steps $\frac{3\times5}{4\times6}$ from your diagram.

14. Show how to solve $\frac{3}{4}\div\frac{2}{3}$ using a bar diagram. Explain how to get the multiplication steps $\frac{3\times3}{4\times2}$ from your bar diagram solution process.

15. Decide whether each of these is multiplication or division and write the equation for each:

a. Janet walked 2/3 of a block. A block is 1/4 of a mile. How many miles did she walk?

b. Kylie only has 2/3 as much ribbon as she needs for the present she is wrapping. She has 3/4 of a yard of ribbon. How many yards of ribbon does she need for the present?

c. Mandy has 7/8 of a gallon of milk. She is pouring glasses that each hold 3/16 of a gallon of milk. How many glasses-full does she have?