

MATH 3/4: ASSIGNMENT 4

FEBRUARY 7, 2010

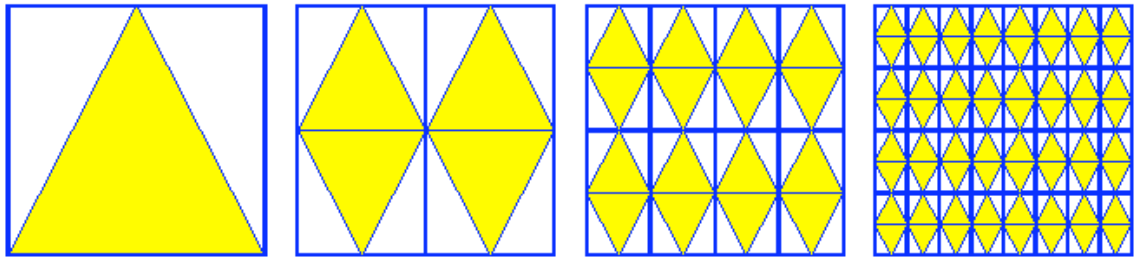
Today we were talking about basic properties of fractions, and also talk about equivalent fractions and how to simplify them.

1. Here are two rows of equivalent fractions, but some numerators and some denominators are missing. Find all the missing numbers.

(a) $\frac{3}{7} = \frac{\quad}{21} = \frac{27}{\quad} = \frac{\quad}{77}$

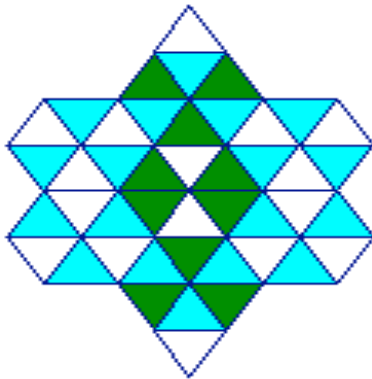
(b) $\frac{2}{5} = \frac{\quad}{75} = \frac{100}{\quad} = \frac{\quad}{35}$

2. Isosceles triangles are inscribed in squares. What fraction of each picture is shaded? Which picture has the largest shaded fraction?

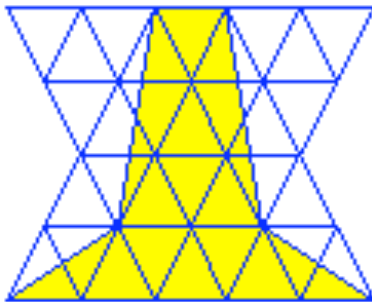


3. (a) What fraction of the design is white?
 (b) What fraction of the design is blue?
 (c) What fraction of the design is green?

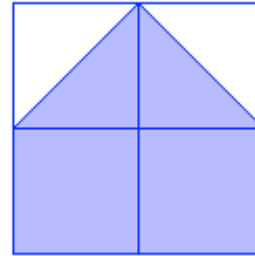
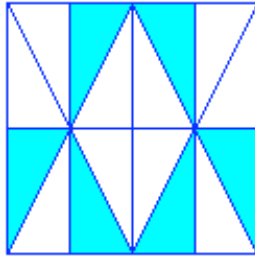
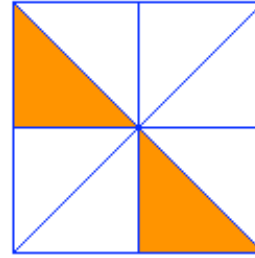
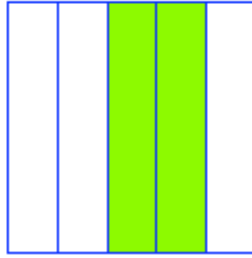
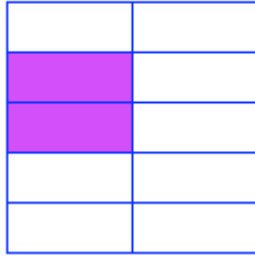
Write your answers in the simplest form.



4. What fraction of the shape is shaded? Do not forget to simplify the fraction!



5. What fraction of each picture is shaded? Express your answer in the simplest form!



6. Simplify the fractions below:

$$\frac{3}{15} =$$

$$\frac{4}{24} =$$

$$\frac{8}{20} =$$

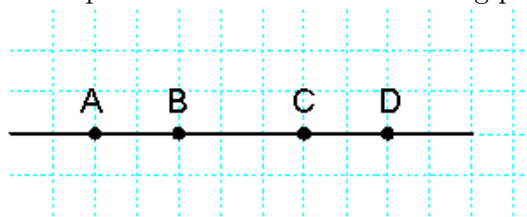
$$\frac{12}{16} =$$

$$\frac{48}{18} =$$

$$\frac{9}{24} =$$

7. Three pears of the same size were divided among 6 children. What fraction of a pear did each child get? Write the answer in the simplest form.

8. Answer questions based on the following picture:



- What fraction of BC is AB?
- What fraction of AD is BC?
- What fraction of AB is AC?
- What fraction of BD is AD?

9. Ivy grows to a length of 4 m in 16 days by doubling its length every day. How many days does it take to grow to a length of $\frac{1}{4}m$?

10. Three apples on one side of the scale balance with three bananas and one apple. If all the bananas weigh the same and all the apples weigh the same, what fraction of the banana's weight is apple's weight?