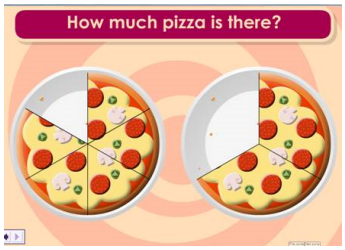
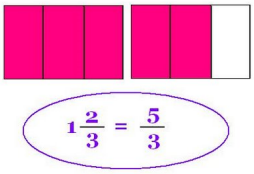


Unit 3

Operations with Fractions



$$\frac{24}{32} X \frac{4}{7} = ???$$

Grade 7 Review of fraction sheet Solutions

Fractions

What is a fraction?

$\frac{3}{4}$ ← numerator, ← denominator

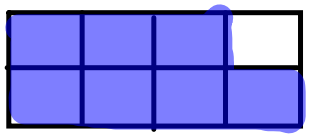
A fraction shows a part of the whole.

It contains 2 parts, the numerator and the denominator.

The numerator is the top number and it tells you how many pieces you have.

The denominator is the bottom number and it tells you how many pieces the whole is divided into.

Example: $\frac{7}{8}$ ← shaded, ← whole cut in to



Equivalent Fractions/ Reducing Fractions

*To get equivalent fractions, multiply (or divide) both the numerator and denominator by the same number.

*When reducing fractions, divide both the numerator and denominator by the same number. If there is no number that the numerator and denominator can be divided by, then the fraction is in lowest terms.

Examples:

$\frac{2}{9} = \frac{6}{27}$ (×3)

$\frac{20}{36} = \frac{5}{9}$ (÷4)

Try the following:

(a) $\frac{6}{16} = \frac{3}{8}$ (÷2)

(b) $\frac{8}{9} = \frac{24}{27}$ (×3)

(c) $\frac{5}{12} = \frac{20}{48}$ (×4)

(d) $\frac{12}{84} = \frac{3}{21}$ (÷4)

2. Write 3 equivalent fractions for each of the following:

(a) $\frac{5}{8}$ $\frac{10}{16}$ $\frac{15}{24}$ $\frac{20}{32}$

(b) $\frac{60}{100} = \frac{30}{50} = \frac{15}{25} = \frac{3}{5}$

(c) $\frac{4}{6} = \frac{2}{3}$ $\frac{2}{3} = \frac{6}{9}$ $\frac{2}{3} = \frac{8}{12}$

(d) $\frac{6}{11} = \frac{12}{22}$ $\frac{6}{11} = \frac{18}{33}$ $\frac{6}{11} = \frac{24}{44}$

Write an equivalent fraction with a denominator of 10, 100 or 1000. Then rewrite as a decimal.

a) $\frac{4}{5} = \frac{8}{10}$ (×2 / ×2)

8 tenths

0.8

tenths

$\frac{12}{10}$ 12 tenths

1.2

$\frac{9}{10}$ 0.9

b) $\frac{10}{25} \times 4 = \frac{40}{100}$

0.40

hundredths

c) $\frac{6}{200} \times 5 = \frac{30}{1000}$

0.030

$\frac{6}{200} = \frac{3}{100}$ = 3%

Class/Homework

Sheet 137 # 1-8

On next 2 slides

$\frac{3}{5} \times \frac{2}{2} = \frac{6}{10} = 0.6$

$\frac{7}{25} \times \frac{4}{4} = \frac{28}{100} = 0.28$

Sheet 137

1) For each fraction, write an equivalent fraction with denominator 10, 100, or 1000. Then, write the fraction as a decimal.

a) $\frac{4}{5}$ $\times 2$ $\times 2$ $= \frac{8}{10}$ 0.8 b) $\frac{3}{50} = \frac{6}{100}$ 0.06 c) $\frac{7}{20}$ d) $\frac{19}{200}$

2) Use Equivalent Fractions to order the fractions from least to greatest

$\frac{2}{3}$ $\times 12$ $\times 12$, $\frac{1}{2}$, $\frac{7}{24}$, $\frac{1}{12}$ $\times 2$ $\times 2$, $\frac{11}{12}$ $\times 2$

$\frac{16}{24}, \frac{12}{24}, \frac{7}{24}, \frac{2}{24}, \frac{22}{24}$

$\frac{1}{12} < \frac{7}{24} < \frac{1}{2} < \frac{2}{3} < \frac{11}{12}$

3)For each of the following find the equivalent fraction

a) $\frac{2}{3} = \frac{\square}{9}$ b) $\frac{3}{4} = \frac{12}{\square}$ c) $\frac{12}{10} = \frac{\square}{5}$ d) $\frac{30}{40} = \frac{15}{\square}$ e) $\frac{5}{5} = \frac{15}{\square}$ f) $\frac{15}{10} = \frac{3}{\square}$

4) For each of the following write 3 more equivalent fractions (Show work)

a) $\frac{1}{2}$

b) $\frac{3}{4}$

c) $\frac{7}{5}$

d) $\frac{1}{3}$

e) $\frac{3}{10}$

f) $\frac{4}{1}$

g) $\frac{2}{5}$

h) $\frac{4}{3}$

5) Express each of the following in lowest terms

a) $\frac{3}{12}$ b) $\frac{8}{20}$ c) $\frac{6}{16}$ d) $\frac{12}{64}$ e) $\frac{24}{80}$ f) $\frac{15}{348}$ g) $\frac{10}{5}$ h) $\frac{75}{100}$

For each of the following scenarios write a fractions and REDUCE to lowest terms.

6) 32 students in total and 12 students do not like pizza. Write a fraction for those that LIKE pizza.

7) a) 4 eggs as a fraction of a dozen

b) 15 minutes as a fraction of a hour.

c) 25 cents as a fraction of a dollar.

8) For each of the following find the equivalent fraction

a) $\frac{5}{8} = \frac{\square}{32}$ b) $\frac{9}{16} = \frac{\square}{64}$ c) $\frac{1}{2} = \frac{\square}{30}$ d) $\frac{3}{4} = \frac{\square}{12}$ e) $\frac{7}{9} = \frac{\square}{27}$ f) $\frac{20}{24} = \frac{5}{6}$ h) $\frac{7}{8} = \frac{42}{\square}$ i) $\frac{2}{3} = \frac{\square}{15}$

j) $\frac{6}{8} = \frac{\square}{16}$ k) $\frac{\square}{100} = \frac{1}{20}$ l) $\frac{45}{300} = \frac{\square}{100}$ m) $\frac{2}{1} = \frac{32}{\square}$ n) $\frac{8}{\square} = \frac{4}{2}$ o) $\frac{5}{6} = \frac{\square}{24}$ p) $\frac{1}{23} = \frac{\square}{20}$ q) $\frac{6}{6} = \frac{\square}{36}$

r) $\frac{30}{40} = \frac{\square}{200}$ s) $\frac{3}{8} = \frac{30}{\square}$ t) $\frac{\square}{16} = \frac{2}{8}$ u) $\frac{7}{1} = \frac{\square}{3}$ v) $\frac{8}{14} = \frac{\square}{84}$ w) $\frac{5}{50} = \frac{\square}{100}$ x) $\frac{2}{21} = \frac{6}{63}$

Attachments

Sheet 137 Equivalent Fractions.docx

Solutions Grade 8 Review of fractions PRE TEST (Gr 7 fraction test).doc