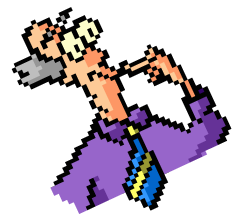


Warm Up Grade 7

Date: Oct. 28



1) Answer the following (Leave answers as mixed fractions)

a) $\frac{8}{6}^{\times 5} + \frac{13}{15}^{\times 2}$

$\frac{40}{30} + \frac{26}{30}$

$\frac{66}{30} = 2\frac{6}{30} \overset{\div 3}{\underset{\div 3}{=}} 2\frac{2}{10} \overset{\div 2}{\underset{\div 2}{=}} = \boxed{2\frac{1}{5}}$

Fraction Reduce

2) Convert each to either mixed or improper fractions

a) $4\frac{1}{7}$ (add)

$\frac{29}{7}$

b) $\frac{58}{8}$

$7\frac{2}{8}$ (Reduce)

$7\frac{1}{4}$

c) $\frac{100}{9}$

$11\frac{1}{9}$

d) $5\frac{2}{11}$

$\frac{57}{11}$

Sheet - Homework Solutions

1. $\frac{15}{2} = 7\frac{1}{2}$

2. $\frac{8}{3} = 2\frac{2}{3}$

3. $\frac{21}{5} = 4\frac{1}{5}$

4) $\frac{9}{3} = 3$

5) $\frac{14}{3} = 4\frac{2}{3}$

6) $\frac{10}{2} = 5$

7) $\frac{22}{7} = 3\frac{1}{7}$

8) $\frac{36}{8} = 4\frac{4}{8}$ or $4\frac{1}{2}$

9) $\frac{13}{9} = 1\frac{4}{9}$

10) $\frac{22}{6} = 3\frac{4}{6}$ or $3\frac{2}{3}$

11) $\frac{72}{8} = 9$

12) $\frac{100}{60} = 2$

$\frac{34}{35} = 6\frac{4}{5}$

13) $\frac{43}{7} = 6\frac{1}{7}$

14) $\frac{34}{5} = 6\frac{4}{5}$

15) $\frac{33}{10} = 3\frac{3}{10}$

16) $\frac{22}{16} = 1\frac{6}{16}$ or $1\frac{3}{8}$

17) $\frac{42}{15} = 2\frac{12}{15}$ or $2\frac{4}{5}$

18) $\frac{31}{10} = 3\frac{1}{10}$

Homework Solutions

Sheet 173

1a) $\frac{9}{8} = 1\frac{1}{8}$

b) $\frac{14}{3} = 4\frac{2}{3}$

c) $\frac{15}{8} = 1\frac{7}{8}$

d) $\frac{21}{5} = 4\frac{1}{5}$

e) $\frac{21}{8} = 2\frac{5}{8}$

f) $\frac{13}{4} = 3\frac{1}{4}$

g) $\frac{33}{10} = 3\frac{3}{10}$

h) $\frac{103}{100} = 1\frac{3}{100}$

2a) $1\frac{1}{3} = \frac{4}{3}$

b) $3\frac{1}{4} = \frac{13}{4}$

c) $5\frac{1}{2} = \frac{11}{2}$

d) $2\frac{3}{10} = \frac{23}{10}$

e) $3\frac{7}{8} = \frac{31}{8}$

f) $2\frac{7}{6} = \frac{19}{6}$

g) $1\frac{1}{100} = \frac{101}{100}$

h) $4 = \frac{20}{5}$

3a) $\frac{6}{4} = 1\frac{2}{4}$ or $1\frac{1}{2}$

b) $\frac{18}{12} = 1\frac{6}{12}$ or $1\frac{1}{2}$

c) $\frac{28}{8} = 3\frac{4}{8}$ or $3\frac{2}{4}$ or $3\frac{1}{2}$

d) $\frac{38}{10} = 3\frac{8}{10}$ or $3\frac{4}{5}$

e) $\frac{170}{100} = 1\frac{70}{100}$ or $1\frac{7}{10}$

f) $\frac{64}{6} = 10\frac{4}{6}$ or $10\frac{2}{3}$

g) $\frac{60}{15} = 4$

h) $\frac{138}{20} = 6\frac{18}{20}$ or $6\frac{9}{10}$

4a $\frac{55}{4} = 13\frac{3}{4}$ games of football

b. $\frac{10}{3} = 3\frac{1}{3}$ games of hockey

5. a) $\frac{230}{690} = \frac{23}{69} = \frac{1}{3}$

b) $\frac{345}{690} = \frac{1}{2}$

c) $\frac{460}{690} < \frac{46}{69} = \frac{2}{3}$

d) $\frac{805}{690} = 1\frac{115}{690}$ or $1\frac{1}{6}$

6 a) $\frac{30}{60} = \frac{1}{2}$

b) $\frac{20}{60} = \frac{1}{3}$

c) $\frac{45}{60} < \frac{3}{4}$

d) $\frac{75}{60} = \frac{5}{4}$ or $1\frac{1}{4}$

e) $\frac{90}{60} = \frac{3}{2}$ or $1\frac{1}{2}$

f) $\frac{140}{60} < 2\frac{20}{60}$ or $2\frac{1}{3}$

Adding Mixed Numbers

There are 2 ways that you can use to add mixed numbers.

Adding

$2\frac{1}{2} + 3\frac{4}{5}$ You can **change to improper fractions**, then add the fractions the same way you always do with common denominators.

$= \frac{5}{2} + \frac{19}{5}$ ← Need C.D.

$= \frac{25}{10} + \frac{38}{10}$

$= \frac{63}{10}$ or $6\frac{3}{10}$

OR

$2\frac{1}{2} + 3\frac{4}{5}$ You can **add the whole numbers, then add the fractions**. But remember that you can not have an answer being both a mixed number and an improper fraction. (Still need common denominators)

$= 2 + 3 + \frac{1}{2} + \frac{4}{5}$ C.D.

$= 5 + \frac{5}{10} + \frac{8}{10}$

$= 5 + \frac{13}{10}$ → change to Mixed

$= 5 + 1\frac{3}{10}$

$= 6\frac{3}{10}$

Do more examples with students

Examples :

(a) $2\frac{3}{10} + 1\frac{5}{8}$

$4\times\frac{23}{10}\cdot\frac{13}{8}\times 5$

$\frac{92}{40}\quad\frac{65}{40}$

$\frac{157}{40} = 3\frac{37}{40}$

$2+1+\frac{3}{10}+\frac{5}{8}$

$3+\frac{12}{40}+\frac{25}{40}$

$3\quad\frac{37}{40}$

(b) $1\frac{9}{10} + 1\frac{1}{5}$

$\frac{19}{10}+\frac{6}{5}$

$\frac{19}{10}+\frac{12}{10}$

$\frac{31}{10} = 3\frac{1}{10}$

OR

$1+1+\frac{9}{10}+\frac{1}{5}$

$2+\frac{9}{10}+\frac{2}{10}$

$2+\frac{11}{10}$ improper

$2+1\frac{1}{10}$

$3\frac{1}{10}$

(c) $3\frac{2}{3} + 4\frac{7}{8}$

$8\cdot\frac{11}{3}+\frac{39}{8\cdot 3}\cdot 3$

$\frac{88}{24}+\frac{117}{24}$

$=\frac{205}{24}$

$8\frac{13}{24}$

or

$3+4+\frac{2}{3}+\frac{7}{8}$

$7+\frac{16}{24}+\frac{21}{24}$

$7+\frac{37}{24}$

$7+1\frac{13}{24}$

$8\frac{13}{24}$

(d) $4\frac{1}{4} + 2\frac{3}{5}$

Examples :

(a) $2\ \frac{3}{10} + 1\frac{5}{8}$

$3 + \frac{12}{40} + \frac{25}{40}$

$3\ \frac{37}{40}$

$\frac{23}{10} + \frac{13}{8}$

$\frac{92}{40} + \frac{65}{40}$

$\frac{157}{40}$

(b) $1\frac{9}{10} + 1\ \frac{1}{5}$

$\frac{19}{10} + \frac{6}{5}$

$\frac{19}{10} + \frac{12}{10}$

$\frac{31}{10}$

$2 + \frac{9}{10} + \frac{2}{10}$

$2 + \frac{11}{10}$

$2 + 1\frac{1}{10}$

$3\frac{1}{10}$

(c) $3\ \frac{2}{3} + 4\ \frac{7}{8}$

$3 + 4 + \frac{2}{3} + \frac{7}{8}$

$7 + \frac{16}{24} + \frac{21}{24}$

$7 + \frac{37}{24}$

$7 + 1\frac{13}{24} = 8\frac{13}{24}$

(d) $4\ \frac{1}{4} + 2\ \frac{3}{5}$

$\frac{17}{4} + \frac{13}{5}$

$\frac{85}{20} + \frac{52}{20}$

$\frac{137}{20}$ or $6\frac{17}{20}$

Class/Homework

d) on ws

Homework pg. 202

1, 2, 3(just add & reduce), 4, 7, 8, 9b, 10, 11