



Warm Up Grade 7

53 school days until



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

a) $5 \times 8 + 13 \times 2$

$5 \times 6 \quad 15 \times 2$

$$\frac{40}{30} + \frac{26}{30} = \frac{66}{30} \div 2 = \frac{33}{15} \div 3 = \frac{11}{5} = 2 \frac{1}{5}$$

2) Convert each to either mixed or improper fractions

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

$\times 7$

$\frac{29}{7}$

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

$7 \frac{2}{8} \div 2$
 $\frac{2}{8} \div 2$
Reduce

$7 \frac{1}{4}$

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

$11 \frac{1}{9}$

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

$\frac{57}{11}$

Sheet-Daffy Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

$$\frac{5 \times 5}{5 \times 2} + \frac{19 \times 2}{5 \times 2}$$

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

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

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)

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

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

$$= 5 + \frac{13}{10}$$

Improper
WRITE as Mixed

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

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

Do more examples with students

$$\underline{6\frac{1}{5}} - \underline{4\frac{7}{10}}$$

$$6 - 4 = 2$$

$$\frac{1}{5} - \frac{7}{10}$$

$$\frac{2}{10} - \frac{7}{10}$$

Can't do
 Need to Borrow

$$1 + \frac{10}{10} + \frac{10}{10} - \frac{7}{10}$$

$$\frac{12}{10} - \frac{7}{10}$$

$$\frac{5}{10}$$

$$\boxed{1\frac{1}{2}}$$

$$\frac{31}{5} - \frac{47}{10}$$

$$\frac{62}{10} - \frac{47}{10}$$

$$\frac{15}{10}$$

$$\frac{3}{2}$$

Change to improper First !!!

Examples :

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

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

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

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

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

$$\frac{19}{10} + \frac{6}{5} \times 2$$

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

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

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

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

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

$$= \frac{205}{24}$$

$$= 8 \frac{13}{24}$$

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

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

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

$$\frac{137}{20}$$

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

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

| | |
|--|-----------------------------|
| $\frac{17}{4} + \frac{13}{5}$ $\frac{85}{20} + \frac{52}{20}$ $\frac{137}{20}$ | $\text{or } 6\frac{17}{20}$ |
|--|-----------------------------|

Class/Homework

Homework pg. 202

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

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

1 ab

2 ab

4 abc } Don't model

6 abc }

7 abcd

8