



Warm Up Grade 7

___ days until



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

$$\begin{array}{l}
 \text{a) } \overset{5 \times}{\underline{8}} + \overset{13 \times 2}{\underline{13}} \\
 \overset{5 \times}{\underline{40}} + \overset{15 \times 2}{\underline{26}} = \frac{66}{30} \xrightarrow{\text{Reduce}} \frac{33}{15} = 2 \frac{3}{15} = 2 \frac{1}{5}
 \end{array}$$

2) Convert each to either mixed or improper fractions

<p>a) $4 \frac{1}{7} = \frac{29}{7}$</p> <p>$\times \rightarrow 7$</p> <p>Mix \rightarrow Entire</p> <p>$4 \times 7 = 28$</p> <p>add top</p> <p>+ 1</p> <hr/> <p>29</p> <p>New top</p> <p>Keep bottom</p>	<p>b) $\frac{58}{8} = 7 \frac{2}{8}$</p> <p>Reduce</p> <p>$7 \frac{1}{4}$</p>	<p>c) $\frac{100}{9} = 11 \frac{1}{9}$</p>	<p>d) $5 \frac{2}{11} = \frac{57}{11}$</p>
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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.

$$\begin{aligned} & \overset{5 \times}{\underset{5 \times}{\frac{5}{2}}} + \overset{19 \times 2}{\underset{5 \times 2}{\frac{4}{5}}} \\ &= \frac{25}{10} + \frac{38}{10} \\ &= \frac{63}{10} \text{ or } 6\frac{3}{10} \end{aligned}$$

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)

$$\begin{aligned} &= 2 + 3 + \frac{1}{2} + \frac{4}{5} \\ &= 5 + \frac{1}{2} + \frac{4}{5} \quad \text{Need C.D.} \\ &= 5 + \frac{5}{10} + \frac{8}{10} \\ &= 5 + \frac{13}{10} \\ &= 5 + 1\frac{3}{10} \\ &= 6\frac{3}{10} \end{aligned}$$

Do more examples with students

Examples :

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

$$4 \times \frac{23}{40} + \frac{13}{8} \times 5$$

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

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

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

$$2 + 1 = 3$$

$$3 + \frac{3}{8} + \frac{5}{8} = 3 + \frac{8}{8} = 3 + 1 = 4$$

$$3 + \frac{12}{40} + \frac{25}{40} = 3 + \frac{37}{40} = 3\frac{37}{40}$$

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

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

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

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

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

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

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

Examples :

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

$3 + \frac{12}{40} + \frac{25}{40}$ $3\frac{37}{40}$	$\frac{23}{10} + \frac{13}{8}$ $\frac{92}{40} + \frac{65}{40}$ $\frac{157}{40}$
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(b) $1\frac{9}{10} + 1\frac{1}{5}$

$\frac{19}{10} + \frac{6}{5}$ $\frac{19}{10} + \frac{12}{10}$ $\frac{31}{10}$	$2 + \frac{9}{10} + \frac{2}{10}$ $2 + \frac{11}{10}$ $2 + 1\frac{1}{10}$ $3\frac{1}{10}$
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(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) $4\frac{1}{4} + 2\frac{3}{5}$

$\frac{17}{4} + \frac{13}{5}$ $\frac{85}{20} + \frac{52}{20}$ $\frac{137}{20}$	$\text{or } 6\frac{17}{20}$
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Class/Homework

Homework pg. 202

1, 2, 3ab(just add & reduce), 4ab