Name: Period:

Notes 2-4

Int 1 **Add/Subtract Fractions** **Unit 2**

When Adding or Subtracting of Fractions:

SAME DENOMINATORS	DIFFERENT DENOMINATORS
• Add or Subtract Just the Numerator • Keep the denominator the same • Simplify if Needed	• Find the Least Common Denominator. • Multiply top & bottom to Change the denominator

Ex. 1: $\frac{5}{9}+\frac{2}{9}=\boxed{\frac{7}{9}}$

Ex. 2: $\frac{4\cdot 1}{4\cdot 3}+\left(-\frac{1}{4}\right)\frac{3}{3}$

$-\frac{4}{12}+\left(-\frac{3}{12}\right)=\boxed{\frac{-7}{12}}$

Ex. 3: $\frac{2\cdot 2}{2\cdot 3}-\frac{1\cdot 3}{2\cdot 3}$

$-\frac{4}{6}-\frac{3}{6}=\frac{-7}{6}=-1\frac{1}{6}$

$-4+-3$

$-3+1$

Ex. 4: $-\frac{3}{7}+\frac{1}{7}=\frac{-2}{7}$

$-2+-2$

Ex. 5: $-\frac{2}{5}+\left(-\frac{2}{5}\right)=\frac{-4}{5}$

Ex. 6: $\frac{5}{8}-\frac{1\cdot 2}{4\cdot 2}$

$\frac{5}{8}-\frac{2}{8}=\boxed{\frac{3}{8}}$

Ex. 7: $\frac{5\cdot 1}{5\cdot 2}+\left(\frac{2}{5}\right)\frac{2}{2}$

$\frac{5}{10}+\frac{4}{10}=\boxed{\frac{9}{10}}$

Ex. 8: $\frac{5}{8}-\frac{7}{8}=\frac{-2\div 2}{8\div 2}=\frac{-1}{4}$

$5-7$

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Int 1 **Add/Subtract Fractions** **Unit 2**

Ex. 9: $-\frac{5}{8}-\frac{3}{8} = \frac{-8}{8} = -1$ whole

$-5+-3$

Ex. 10: $\frac{1}{6}+\frac{2}{3}$ $\cdot 2$

$\frac{1}{6}+\frac{4}{6}=\frac{5}{6}$

Ex. 11: $\frac{6\cdot 2}{6\cdot 5}-\frac{2\cdot 4}{2\cdot 15}+\frac{1\cdot 3}{10\cdot 3}$

5
10
15

$-\frac{12}{30}-\frac{8}{30}+\frac{3}{30}=\frac{-17}{30}$

$-12+-8+3=-20+3$

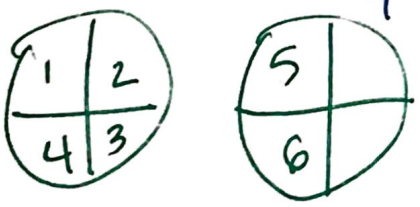
Ex. 12: $\frac{2\cdot 3}{2\cdot 4}+\frac{4\cdot 1}{4\cdot 2}-\frac{5}{8}$

$-\frac{6}{8}+\frac{4}{8}-\frac{5}{8}=\frac{-7}{8}$

$-6+4-5=$
$-2-5=$

Ex. 13: Sofia ate $\frac{1}{4}$ of a cheese pizza. Jack ate $\frac{2}{4}$ of a cheese pizza. Spencer ate $\frac{3}{4}$ of a pepperoni pizza. How much pizza did the three friends eat altogether?

$\frac{1}{4}+\frac{2}{4}+\frac{3}{4}=\frac{6\div 2}{4\div 2}=\frac{3}{2}=1\frac{1}{2}$ pizzas.



Ex. 14: Cassie cuts $\frac{5}{16}$ inch off the top of a photo and $\frac{3}{8}$ inch off the bottom. How much shorter is the total height of the photo now?

$\frac{5}{16}+\frac{3\cdot 2}{8\cdot 2}$

$\frac{5}{16}+\frac{6}{16}=\frac{11}{16}$ in. shorter

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Int 1 **Notes 2-4** **Unit 2**

Add/Subtract Fractions

① $2\frac{3\cdot 3}{5\cdot 3} + 3\frac{7}{15}$

$2\frac{9}{15} + 3\frac{7}{15} = 5\frac{16}{15}$

$5 + 1 + \frac{1}{15} = \boxed{6\frac{1}{15}}$

② $-2\frac{7}{\boxed{12}} + 5\frac{1}{\boxed{4}} =$

$24+7$ $20+1$

$-\frac{31}{12} + \frac{21\cdot 3}{4\cdot 3} = \frac{-31}{12} + \frac{63}{12} = \frac{32\div 4}{12\div 4} = \boxed{\frac{8}{3}}$

$$\begin{array}{r} 63 \\ -31 \\ \hline 32 \end{array}$$