S. 41 / 6

a. $\frac{11}{18}-\frac{29}{90}=\frac{55}{90}-\frac{29}{90}=\frac{26}{90}=\frac{13}{45}$

$\frac{8}{15}+\frac{3}{8}=\frac{64}{120}+\frac{45}{120}=\frac{109}{120}$

$\frac{21}{12}-\frac{23}{28}=\frac{147}{84}-\frac{69}{84}=\frac{78}{84}=\frac{39}{42}=\frac{13}{14}$

b. $\frac{1}{16}+1\frac{5}{9}=\frac{1}{16}+\frac{14}{9}=\frac{9}{144}+\frac{224}{144}=\frac{233}{144}=1\frac{89}{144}$

$1\frac{17}{36}+2\frac{1}{4}=1\frac{17}{36}+2\frac{9}{36}=3\frac{26}{36}=3\frac{13}{18}=\frac{67}{18}$

$1\frac{1}{18}+\frac{15}{27}=1\frac{3}{54}+\frac{30}{54}=1\frac{33}{54}=1\frac{11}{18}=\frac{29}{18}$

c. $\frac{97}{96}-\frac{7}{12}=\frac{97}{96}-\frac{56}{96}=\frac{41}{96}$

$\frac{6}{13}-\frac{1}{12}=\frac{72}{156}-\frac{13}{156}=\frac{59}{156}$

$\frac{62}{105}+\frac{43}{70}=\frac{124}{210}+\frac{129}{210}=\frac{253}{210}=1\frac{43}{210}$

S. 45 / 7

7 a) $\frac{2}{3}:3=\frac{2}{9}$ b) $\frac{8}{9}:4=\frac{2}{9}$ c) $\frac{5}{7}:4=\frac{5}{28}$

d) $\frac{12}{13}:6=\frac{2}{13}$ e) $\frac{6}{7}:5=\frac{6}{35}$ f) $\frac{10}{15}:5=\frac{2}{15}$

g) $\frac{6}{14}:5=\frac{3}{35}$ h) $\frac{10}{8}:5=\frac{1}{4}$

S. 55 / 1

a. $\frac{7}{4}-\frac{11}{12}=\frac{21}{12}-\frac{11}{12}=\frac{10}{12}=\frac{5}{6}$

$\frac{2}{5}\cdot\frac{4}{3}=\frac{2\cdot 4}{5\cdot 3}=\frac{8}{15}$

$\frac{1}{4}:\frac{7}{16}=\frac{1}{4}\cdot\frac{16}{7}=\frac{1\cdot 4}{1\cdot 7}=\frac{4}{7}$

b. $\frac{3}{5}\cdot\frac{4}{3}=\frac{1\cdot 4}{5\cdot 1}=\frac{4}{5}$

$\frac{3}{4}:\frac{7}{6}=\frac{3}{4}\cdot\frac{6}{7}=\frac{3\cdot 3}{2\cdot 7}=\frac{9}{14}$

$\frac{5}{6}+\frac{1}{2}=\frac{5}{6}+\frac{3}{6}=\frac{8}{6}=\frac{4}{3}=1\frac{1}{3}$

c. $\frac{9}{10}:\frac{3}{5}=\frac{9}{10}\cdot\frac{5}{3}=\frac{3\cdot 1}{2\cdot 1}=\frac{3}{2}=1\frac{1}{2}$

$\frac{1}{11}-\frac{1}{33}=\frac{3}{33}-\frac{1}{33}=\frac{2}{33}$

$\frac{3}{8}+\frac{5}{12}=\frac{9}{24}+\frac{10}{24}=\frac{19}{24}$

d. $\frac{8}{15}-\frac{1}{4}=\frac{32}{60}-\frac{15}{60}=\frac{17}{60}$

$\frac{3}{8}+\frac{2}{5}=\frac{15}{40}+\frac{16}{40}=\frac{31}{40}$

$\frac{5}{9}\cdot\frac{8}{11}=\frac{5\cdot 8}{9\cdot 11}=\frac{40}{99}$

S. 55 / 10

a. $\mathbf{\frac{2}{3}}+\frac{9}{11}+\mathbf{\frac{1}{3}}=\mathbf{\frac{3}{3}}+\frac{9}{11}=\mathbf{1}\frac{9}{11}$

b. $\frac{2}{3}-\frac{1}{7}+\frac{2}{9}=\frac{42}{63}-\frac{9}{63}+\frac{14}{63}=\frac{47}{63}$

c. $\frac{3}{5}\cdot\frac{7}{11}\cdot\frac{11}{21}=\frac{\mathbf{3}\cdot\mathbf{7}\cdot 11}{5\cdot 11\cdot\mathbf{21}}=\frac{1}{5}$

d. $\frac{27}{31}\cdot\frac{2}{3}\cdot\frac{31}{9}=\frac{\mathbf{27}\cdot 2\cdot 31}{31\cdot\mathbf{3}\cdot\mathbf{9}}=2$

e. $\frac{26}{15}\cdot\frac{25}{28}:\frac{39}{42}=\frac{\mathbf{26}\cdot 25\cdot 42}{15\cdot 28\cdot\mathbf{39}}=\frac{\mathbf{2}\cdot 5\cdot 42}{3\cdot 28\cdot\mathbf{3}}=\frac{2\cdot 5\cdot 6}{3\cdot 4\cdot 3}=\frac{5}{3}$

f. $\frac{4}{5}+\frac{8}{9}:\frac{20}{27}=\frac{4}{5}+\frac{8}{9}\cdot\frac{27}{20}=\frac{4}{5}+\frac{2}{1}\cdot\frac{3}{5}=\frac{10}{5}=2$

g. $\frac{5}{2}:\frac{7}{4}+\frac{4}{7}=\frac{5}{2}\cdot\frac{4}{7}+\mathbf{1}\cdot\frac{4}{7}=\frac{7}{2}\cdot\frac{4}{7}=2$

h. $\left(\frac{27}{16}+\frac{3}{8}\right):\frac{3}{2}=\left(\frac{27}{16}+\frac{6}{16}\right)\cdot\frac{2}{3}=\frac{33}{16}\cdot\frac{2}{3}=\frac{11}{8}$