

Worksheet

04/29/2018

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Problem quickname: 6408

1)

Calculate the result.

Quick:
6408

$$\begin{aligned} \text{a) } & \frac{31}{41} - \frac{6}{41} - \frac{7}{41} \mid \text{convert to like quantities (lcm): 41} \\ & = \frac{31}{41} - \frac{6}{41} - \frac{7}{41} \mid \text{add numerators} \\ & = \frac{18}{41} \end{aligned}$$

$$\begin{aligned} \text{b) } & \frac{9}{22} - \frac{2}{11} - \frac{1}{11} \mid \text{convert to like quantities (lcm): 22} \\ & = \frac{9}{22} - \frac{4}{22} - \frac{2}{22} \mid \text{add numerators} \\ & = \frac{3}{22} \end{aligned}$$

$$\begin{aligned} \text{c) } & \frac{5}{43} - \frac{3}{43} + \frac{20}{43} \mid \text{convert to like quantities (lcm): 43} \\ & = \frac{5}{43} - \frac{3}{43} + \frac{20}{43} \mid \text{add numerators} \\ & = \frac{22}{43} \end{aligned}$$

$$\begin{aligned} \text{d) } & \frac{9}{37} + \frac{7}{37} + \frac{10}{37} \mid \text{convert to like quantities (lcm): 37} \\ & = \frac{9}{37} + \frac{7}{37} + \frac{10}{37} \mid \text{add numerators} \\ & = \frac{26}{37} \end{aligned}$$

$$\begin{aligned} \text{e) } & \frac{9}{46} + \frac{1}{2} - \frac{5}{23} \mid \text{convert to like quantities (lcm): 46} \\ & = \frac{9}{46} + \frac{23}{46} - \frac{10}{46} \mid \text{add numerators} \\ & = \frac{22}{46} \mid \text{reduce} \\ & = \frac{11}{23} \end{aligned}$$

$$\begin{aligned} \text{f) } & \frac{5}{39} - \frac{2}{39} + \frac{32}{39} \mid \text{convert to like quantities (lcm): 39} \\ & = \frac{5}{39} - \frac{2}{39} + \frac{32}{39} \mid \text{add numerators} \\ & = \frac{35}{39} \end{aligned}$$

$$\begin{aligned}
 \text{g) } & \frac{11}{36} + \frac{5}{18} - \frac{5}{18} \mid \text{convert to like quantities (lcm): 36} \\
 & = \frac{11}{36} + \frac{10}{36} - \frac{10}{36} \mid \text{add numerators} \\
 & = \frac{11}{36}
 \end{aligned}$$

$$\begin{aligned}
 \text{h) } & \frac{1}{9} - \frac{1}{18} + \frac{17}{36} \mid \text{convert to like quantities (lcm): 36} \\
 & = \frac{4}{36} - \frac{2}{36} + \frac{17}{36} \mid \text{add numerators} \\
 & = \frac{19}{36}
 \end{aligned}$$

2)

Calculate the result.

Quick:
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$$\begin{aligned}
 \text{a) } & 1\frac{17}{29} - \frac{19}{29} + \frac{15}{29} - \frac{5}{29} \mid \text{convert to like quantities (lcm): 29} \\
 & = \frac{46}{29} - \frac{19}{29} + \frac{15}{29} - \frac{5}{29} \mid \text{add numerators} \\
 & = \frac{37}{29} = 1\frac{8}{29}
 \end{aligned}$$

$$\begin{aligned}
 \text{b) } & 1\frac{1}{79} + \frac{45}{79} + 1\frac{17}{79} - 2\frac{37}{79} \mid \text{convert to like quantities (lcm): 79} \\
 & = \frac{80}{79} + \frac{45}{79} + \frac{96}{79} - \frac{195}{79} \mid \text{add numerators} \\
 & = \frac{26}{79}
 \end{aligned}$$

$$\begin{aligned}
 \text{c) } & 2\frac{26}{33} + \frac{16}{33} - \frac{29}{33} - 1\frac{2}{33} \mid \text{convert to like quantities (lcm): 33} \\
 & = \frac{92}{33} + \frac{16}{33} - \frac{29}{33} - \frac{35}{33} \mid \text{add numerators} \\
 & = \frac{44}{33} \mid \text{reduce} \\
 & = \frac{4}{3} = 1\frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 \text{d) } & 1\frac{21}{25} - \frac{11}{25} - \frac{3}{25} - \frac{23}{25} \mid \text{convert to like quantities (lcm): 25} \\
 & = \frac{46}{25} - \frac{11}{25} - \frac{3}{25} - \frac{23}{25} \mid \text{add numerators} \\
 & = \frac{9}{25}
 \end{aligned}$$

3)

Calculate the result.

$$\begin{aligned} \text{a) } \frac{97}{73} + \frac{14}{73} &| \text{convert to like quantities (lcm): 73} \\ &= \frac{97}{73} + \frac{14}{73} | \text{add numerators} \\ &= \frac{111}{73} = 1 \frac{38}{73} \end{aligned}$$

$$\begin{aligned} \text{b) } \frac{43}{96} + \frac{5}{24} &| \text{convert to like quantities (lcm): 96} \\ &= \frac{43}{96} + \frac{20}{96} | \text{add numerators} \\ &= \frac{63}{96} | \text{reduce} \\ &= \frac{21}{32} \end{aligned}$$

$$\begin{aligned} \text{c) } \frac{27}{28} + \frac{43}{42} &| \text{convert to like quantities (lcm): 84} \\ &= \frac{81}{84} + \frac{86}{84} | \text{add numerators} \\ &= \frac{167}{84} = 1 \frac{83}{84} \end{aligned}$$

$$\begin{aligned} \text{d) } \frac{29}{83} + \frac{33}{83} &| \text{convert to like quantities (lcm): 83} \\ &= \frac{29}{83} + \frac{33}{83} | \text{add numerators} \\ &= \frac{62}{83} \end{aligned}$$

$$\begin{aligned} \text{e) } \frac{6}{89} + \frac{57}{89} &| \text{convert to like quantities (lcm): 89} \\ &= \frac{6}{89} + \frac{57}{89} | \text{add numerators} \\ &= \frac{63}{89} \end{aligned}$$

$$\begin{aligned} \text{f) } \frac{49}{48} + \frac{29}{16} &| \text{convert to like quantities (lcm): 48} \\ &= \frac{49}{48} + \frac{87}{48} | \text{add numerators} \\ &= \frac{136}{48} | \text{reduce} \\ &= \frac{17}{6} = 2 \frac{5}{6} \end{aligned}$$

$$\begin{aligned} \text{g) } \frac{1}{18} + \frac{26}{27} &| \text{convert to like quantities (lcm): 54} \\ &= \frac{3}{54} + \frac{52}{54} | \text{add numerators} \\ &= \frac{55}{54} = 1 \frac{1}{54} \end{aligned}$$

$$\begin{aligned} \text{h) } & \frac{9}{38} + \frac{23}{19} \mid \text{convert to like quantities (lcm): } 38 \\ & = \frac{9}{38} + \frac{46}{38} \mid \text{add numerators} \\ & = \frac{55}{38} = 1\frac{17}{38} \end{aligned}$$

$$\begin{aligned} \text{i) } & \frac{43}{9} + \frac{19}{3} \mid \text{convert to like quantities (lcm): } 9 \\ & = \frac{43}{9} + \frac{57}{9} \mid \text{add numerators} \\ & = \frac{100}{9} = 11\frac{1}{9} \end{aligned}$$

$$\begin{aligned} \text{j) } & \frac{53}{96} + \frac{3}{4} \mid \text{convert to like quantities (lcm): } 96 \\ & = \frac{53}{96} + \frac{72}{96} \mid \text{add numerators} \\ & = \frac{125}{96} = 1\frac{29}{96} \end{aligned}$$

4)

Calculate the result.

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$$\begin{aligned} \text{a) } & \frac{29}{91} - \frac{12}{91} + \frac{24}{91} + \frac{32}{91} \mid \text{convert to like quantities (lcm): } 91 \\ & = \frac{29}{91} - \frac{12}{91} + \frac{24}{91} + \frac{32}{91} \mid \text{add numerators} \\ & = \frac{73}{91} \end{aligned}$$

$$\begin{aligned} \text{b) } & \frac{19}{97} + \frac{5}{97} - \frac{10}{97} - \frac{1}{97} \mid \text{convert to like quantities (lcm): } 97 \\ & = \frac{19}{97} + \frac{5}{97} - \frac{10}{97} - \frac{1}{97} \mid \text{add numerators} \\ & = \frac{13}{97} \end{aligned}$$

$$\begin{aligned} \text{c) } & \frac{5}{38} + \frac{7}{38} - \frac{5}{38} - \frac{5}{76} \mid \text{convert to like quantities (lcm): } 76 \\ & = \frac{10}{76} + \frac{14}{76} - \frac{10}{76} - \frac{5}{76} \mid \text{add numerators} \\ & = \frac{9}{76} \end{aligned}$$

$$\begin{aligned} \text{d) } & \frac{13}{96} + \frac{3}{32} + \frac{5}{32} + \frac{25}{96} \mid \text{convert to like quantities (lcm): } 96 \\ & = \frac{13}{96} + \frac{9}{96} + \frac{15}{96} + \frac{25}{96} \mid \text{add numerators} \\ & = \frac{62}{96} \mid \text{reduce} \\ & = \frac{31}{48} \end{aligned}$$

$$\begin{aligned}
 \text{e) } & \frac{43}{49} - \frac{23}{98} - \frac{1}{14} - \frac{31}{98} \mid \text{convert to like quantities (lcm): 98} \\
 & = \frac{86}{98} - \frac{23}{98} - \frac{7}{98} - \frac{31}{98} \mid \text{add numerators} \\
 & = \frac{25}{98}
 \end{aligned}$$

$$\begin{aligned}
 \text{f) } & \frac{3}{17} - \frac{1}{17} + \frac{2}{17} - \frac{2}{85} \mid \text{convert to like quantities (lcm): 85} \\
 & = \frac{15}{85} - \frac{5}{85} + \frac{10}{85} - \frac{2}{85} \mid \text{add numerators} \\
 & = \frac{18}{85}
 \end{aligned}$$

$$\begin{aligned}
 \text{g) } & \frac{6}{29} - \frac{5}{87} - \frac{5}{87} - \frac{5}{87} \mid \text{convert to like quantities (lcm): 87} \\
 & = \frac{18}{87} - \frac{5}{87} - \frac{5}{87} - \frac{5}{87} \mid \text{add numerators} \\
 & = \frac{3}{87} \mid \text{reduce} \\
 & = \frac{1}{29}
 \end{aligned}$$

$$\begin{aligned}
 \text{h) } & \frac{19}{86} + \frac{9}{86} - \frac{17}{86} + \frac{16}{43} \mid \text{convert to like quantities (lcm): 86} \\
 & = \frac{19}{86} + \frac{9}{86} - \frac{17}{86} + \frac{32}{86} \mid \text{add numerators} \\
 & = \frac{43}{86} \mid \text{reduce} \\
 & = \frac{1}{2}
 \end{aligned}$$

$$\begin{aligned}
 \text{i) } & \frac{5}{19} - \frac{15}{76} + \frac{13}{38} + \frac{3}{38} \mid \text{convert to like quantities (lcm): 76} \\
 & = \frac{20}{76} - \frac{15}{76} + \frac{26}{76} + \frac{6}{76} \mid \text{add numerators} \\
 & = \frac{37}{76}
 \end{aligned}$$

$$\begin{aligned}
 \text{j) } & \frac{27}{73} - \frac{18}{73} - \frac{8}{73} + \frac{69}{73} \mid \text{convert to like quantities (lcm): 73} \\
 & = \frac{27}{73} - \frac{18}{73} - \frac{8}{73} + \frac{69}{73} \mid \text{add numerators} \\
 & = \frac{70}{73}
 \end{aligned}$$

Good Luck!