Add/Subtract Word Problems

2. Edward $\frac{3}{4}$ (×3) $\frac{9}{12}$ James $\frac{7}{12}$ $\frac{7}{12}$ Charles $\frac{2}{3}$ (×4) $\frac{8}{12}$

a) Most was Edward

b) Least was Charles

6. Mrs. Morris $\frac{18}{30}$ (×2) $\frac{36}{60}$ Mrs. Payne $\frac{12}{20}$ (×3) $\frac{36}{60}$

a) Both $\frac{36}{60} = \frac{3}{5}$ girls

b) Both the same

8. $5\frac{1}{4} - 3\frac{3}{4}$

$= \frac{21}{4} - \frac{15}{4}$

$= \frac{6}{4}$

$= 1\frac{2}{4}$

$= 1\frac{1}{2}$ miles

9. $2\frac{3}{5} + 4\frac{9}{10}$

$= \frac{13}{5} + \frac{49}{10}$

(×2) $= \frac{26}{10} + \frac{49}{10}$

$= \frac{75}{10}$

$= 7\frac{5}{10} = 7\frac{1}{2}$ kg

12. $6\frac{1}{3} - 2\frac{5}{8}$

$= \frac{19}{3} - \frac{21}{8}$

$= \frac{152}{24} - \frac{63}{24}$ (×8, ×3)

$= \frac{89}{24}$

$= 3\frac{17}{24}$ m

13. $4\frac{1}{3} + 2\frac{1}{4} + 5\frac{1}{6}$

$= \frac{13}{3} + \frac{9}{4} + \frac{31}{6}$

$= \frac{52}{12} + \frac{27}{12} + \frac{62}{12}$ (×4, ×3, ×2)

$= \frac{141}{12}$

$= 11\frac{9}{12} = 11\frac{3}{4}$ m

16. $\frac{3}{5} + \frac{1}{8}$

$= \frac{24}{40} + \frac{5}{40}$ (×8, ×5)

$= \frac{29}{40}$

Colin $= 1 - \frac{29}{40}$

$= \frac{40}{40} - \frac{29}{40}$

$= \frac{11}{40}$

21. $\frac{1}{4} + \frac{1}{5}$

$= \frac{5}{20} + \frac{4}{20}$ (×5, ×4)

$= \frac{9}{20}$

Left $= 1 - \frac{9}{20}$

$= \frac{20}{20} - \frac{9}{20}$

$= \frac{11}{20}$

24. $\frac{1}{3} + \frac{1}{4} + \frac{1}{8}$

$= \frac{8}{24} + \frac{6}{24} + \frac{3}{24}$ (×8, ×6, ×3)

$= \frac{17}{24}$

Shabina $= 1 - \frac{17}{24}$

$= \frac{24}{24} - \frac{17}{24} = \frac{7}{24}$

Perimeter = length + length + width + width

26. a) $P = 8\frac{1}{6}$ m

length $= 2\frac{3}{4}$ m

$2\frac{3}{4} + 2\frac{3}{4}$

$= \frac{11}{4} + \frac{11}{4}$

$= \frac{22}{4}$

2 widths $= 8\frac{1}{6} - \frac{22}{4}$

$= \frac{49}{6} - \frac{22}{4}$

$= \frac{98}{12} - \frac{66}{12}$

$= \frac{32}{12}$

$\Rightarrow$ one width $= \frac{16}{12}$

$= 1\frac{4}{12}$

$= 1\frac{1}{3}$ m

b) $P = 12\frac{9}{10}$ m

width $= 2\frac{1}{4}$ m

$2\frac{1}{4} + 2\frac{1}{4}$

$= \frac{9}{4} + \frac{9}{4}$

$= \frac{18}{4}$

2 lengths $= 12\frac{9}{10} - \frac{18}{4}$

$= \frac{129}{10} - \frac{18}{4}$

$\times 2 \left(= \frac{258}{20} - \frac{90}{20} \right) \times 5$

$= \frac{168}{20}$

$\Rightarrow$ one length $= \frac{84}{20}$

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

$= 4\frac{1}{5}$ m

Milroy

26. c) $P = 17\frac{7}{12}$ m

length $= 3\frac{1}{8}$ m

$3\frac{1}{8} + 3\frac{1}{8}$

$= \frac{25}{8} + \frac{25}{8}$

$= \frac{50}{8}$

2 widths $= 17\frac{7}{12} - \frac{50}{8}$

$= \frac{211}{12} - \frac{50}{8}$

$= \frac{422}{24} - \frac{150}{24}$ (×2, ×3)

$= \frac{272}{24}$

$\Rightarrow$ one width $= \frac{136}{24}$

$= 5\frac{16}{24}$

$= 5\frac{2}{3}$ m

d) $P = 10\frac{2}{45}$ m

width $= 1\frac{4}{5}$ m

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

$= \frac{9}{5} + \frac{9}{5}$

$= \frac{18}{5}$

2 lengths $= 10\frac{2}{45} - \frac{18}{5}$

$= \frac{452}{45} - \frac{18}{5}$

$= \frac{452}{45} - \frac{162}{45}$ (×9)

$= \frac{290}{45}$

$\Rightarrow$ one width $= \frac{145}{45}$

$= 3\frac{10}{45}$

$= 3\frac{2}{9}$ m