

52. g. $\frac{m+15}{a} + \frac{m+7}{b} - \frac{m}{c}$

m stands for the time that all 3 valves were open together.

53. a. $.85c$

b. $2(.85c)$ or $.85(2c)$

c. $.85c + .70c$ or $1.55c$

d. $.85c$

e. $2c$ centiliters of 85%

f. $2c$ centiliters of $77\frac{1}{2}\%$

g. $2c$ centiliters of $42\frac{1}{2}\%$

h. $(c+d)$ centiliters of $\frac{85c}{c+d}\%$

54. a. 20 pounds of 75%

b. 25 pounds of 80%

c. 25 pounds of $\frac{10(80) + 15(60)}{10+15}\%$

OR 25 pounds of 68%

d. 20 pounds of 40%

e. $(10+p)$ pounds of 80%

f. $(10+p)$ pounds of $\frac{80(10)}{10+p}\%$

g. $(10 + p)$ pounds of $\frac{80(10) + 70p}{10+p}\%$

h. 30 pounds of $\frac{10(80) + 10(70) + 10(60)}{10 + 10 + 10}\%$

OR 30 pounds of 70%

i. $10 + p + q + r$ pounds of $\frac{80(10) + 70p + 60q + 30r}{10 + p + q + r}\%$