Problem Solving Worksheet 5

1. $\frac{2}{3} + \frac{5}{12} \Rightarrow \frac{8}{12} + \frac{5}{12} = \boxed{\frac{13}{12}}$

common denominator

2. $\frac{7}{8} - \frac{1}{2} \Rightarrow \frac{7}{8} - \frac{4}{8} = \boxed{\frac{3}{8}}$

3. $\frac{14}{3} \times \frac{7}{8} \Rightarrow \frac{7}{3} \times \frac{7}{4} = \boxed{\frac{49}{12}}$

can be reduced

4. $\frac{5}{21} \div \frac{15}{14}$ Flip $\Rightarrow \frac{5}{21} \times \frac{14}{15} \Rightarrow \frac{1}{21} \times \frac{14}{3} \Rightarrow \frac{1}{3} \times \frac{2}{3} = \boxed{\frac{2}{9}}$

reduce, reduce

8. $\frac{5}{27} \times \frac{3}{50} \Rightarrow \frac{1}{27} \times \frac{3}{10} \Rightarrow \frac{1}{9} \times \frac{1}{10} \Rightarrow \boxed{\frac{1}{90}}$

reduce, reduce

Problem Solving Worksheet 10

1. $14x + 12 = 40$ -12 -12 $\Rightarrow \frac{14x}{14} = \frac{28}{14} \Rightarrow \boxed{x = 2}$

2. $x \cdot \frac{56}{x} = 22 \cdot x \Rightarrow \frac{56}{22} = \frac{22x}{22} \Rightarrow \boxed{x = 2.55}$

4. $\frac{kx}{x} = \frac{a + by}{x} \Rightarrow \boxed{k = \frac{a+by}{x}}$

6. $4z \cdot \frac{y}{4z} = \frac{x}{w} \cdot 4z \cdot w \Rightarrow wy = x4z \Rightarrow \frac{wy}{4x} = \frac{x4z}{4x}$

$$\boxed{z = \frac{wy}{4x}}$$

10. $V \cdot D = \frac{\text{mass}}{\text{volume}} \cdot V \Rightarrow \frac{VD}{D} = \frac{M}{D} \Rightarrow \boxed{V = \frac{M}{D}}$

$$V = \frac{84.0\,g \cdot cm^3}{3.20\,g} = \boxed{26.25\,cm^3}$$