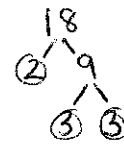
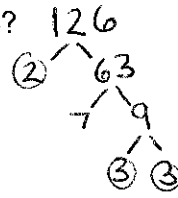


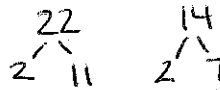
1. What is the greatest common factor of 126 and 18?



$$GCF = 2 \cdot 3 \cdot 3 = 18$$

2. Reduce to lowest terms: $\frac{18 \div 18}{126 \div 18} = \frac{1}{7}$

3. What is the least common multiple of 22 and 14?



$$LCM = 2 \cdot 7 \cdot 11 = 154$$

4. Find the least common denominator of the following fractions: $\frac{5}{22}, \frac{9}{14}$ LCD = 154

5. Change the improper fraction to a mixed number in lowest terms: $\frac{98}{12}$

$$12 \overline{)98} \begin{array}{r} 8 \\ \underline{96} \\ 2 \end{array} \quad \frac{98}{12} = 8 R 2 = 8 \frac{2}{12} = 8 \frac{1}{6}$$

6. Change the mixed number to an improper fraction in lowest terms: $6 \frac{1}{4} = \frac{25}{4}$

7. Simplify. Make sure your final answer is in lowest terms: $\frac{13}{36} - \frac{5}{36} = \frac{13-5}{36} = \frac{8}{36} = \frac{2}{9}$

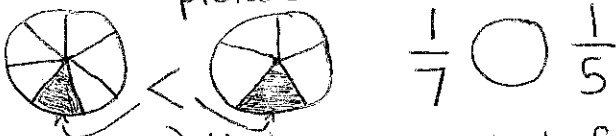
8. Simplify. Make sure your final answer is in lowest terms: $\frac{3}{10} + \frac{1}{8}$ LCD = 40

$$= \frac{12}{40} + \frac{5}{40} = \frac{12+5}{40} = \frac{17}{40}$$

9. Bonus: Macy's is advertising $\frac{1}{7}$ off all fall clothing. Bloomingdale's is advertising $\frac{1}{5}$ off.

Which store is offering the bigger discount? (Justify your answer.)

5) Draw a picture



1) Write as equivalent fractions: $\frac{1}{7} \times \frac{5}{5} = \frac{5}{35}$ and $\frac{1}{5} \times \frac{7}{7} = \frac{7}{35}$. $\frac{5}{35} < \frac{7}{35}$ → Bloomingdale's discount is bigger

2) Cross multiply: $\frac{1}{7} ? \frac{1}{5} \rightarrow 1 \cdot 5 ? 1 \cdot 7 \rightarrow 5 ? 7 \rightarrow 5 < 7 \rightarrow$ same

3) Compute decimals: $\frac{0.14}{30} < \frac{0.2}{50} \rightarrow$ same

4) $\frac{1}{7}$ $\frac{1}{5}$ ∴ (since) numerators are the same, the fraction with the smaller denominator is the larger fraction
∴ (therefor) $\frac{1}{5}$ is larger than $\frac{1}{7}$ → same