

7.1.2

Hwk

7-21) 35 mph Best spot 27 miles away

a) $\frac{2}{3}$ hour $\Rightarrow 60 \div 3 = 20 \text{ min} \times 2 = 40 \text{ min}$

$\frac{2}{3} = 67\%$ $(0.67)(35) = 23.45 \text{ miles}$

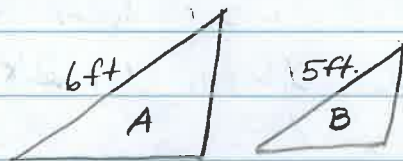
No, she will only go a little over 23 miles

$\frac{35}{60 \text{ min}} = \frac{x}{40 \text{ min}}$
 $\div 1.5 \rightarrow 23.3 \text{ miles}$

b) $\frac{35 \text{ miles}}{60 \text{ min}} = \frac{27 \text{ miles}}{x \text{ min.}}$ approx. 46 min.
 $\div 1.296 \rightarrow (46.3 \text{ min.})$

7-22)

a) A to B
 $\frac{5}{6}$



b) B to A
 $\frac{6}{5}$

c) The scale factors are reciprocals

$$7-23) \quad \frac{1}{2}x + \frac{7}{12} + \frac{3}{5}x - \frac{2}{3}$$

a)

$$\frac{1}{2}x + \frac{3}{5}x + \frac{7}{12} - \frac{2}{3}$$

$$= \frac{5}{10}x + \frac{6}{10}x + \frac{7}{12} - \frac{8}{12}$$

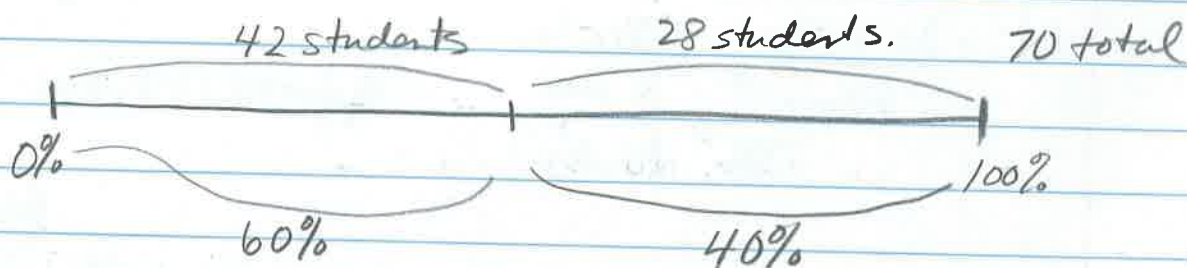
$$\frac{11}{10}x + \left(-\frac{1}{12}\right)$$

$$b) \quad 5.3 - 2.8x - 7.1 + 3.9x$$

$$5.3 - 7.1 - 2.8x + 3.9x$$

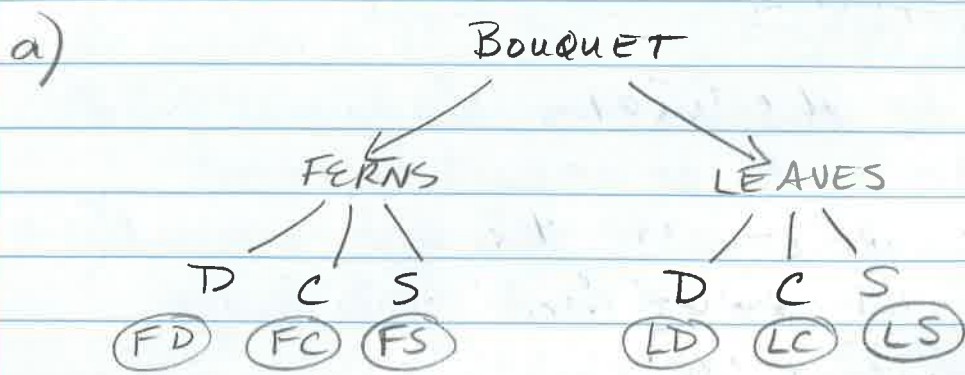
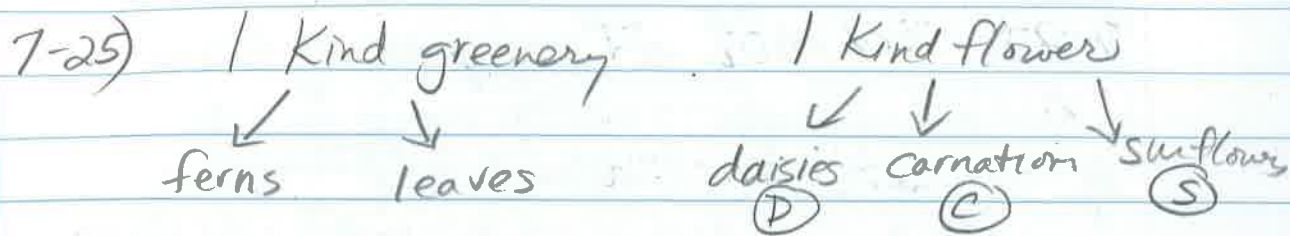
$$(1.8) + 1.1x$$

7-24)



$$\frac{28}{x} = \frac{40}{100} \Rightarrow \frac{28}{x} = \frac{4}{10} \quad \text{70 total students}$$

$$\frac{x}{70} = \frac{60}{100} \Rightarrow \frac{x}{70} = \frac{6}{10} \quad \text{42 student is 60\%}$$



6 possible combos

b) $P(\text{Ferns}) = \frac{3}{6} = \frac{1}{2}$

c) $P(\text{not sunflowers}) = \frac{4}{6} = \frac{2}{3}$

d) $P(\text{leaves + carnations}) = \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6}$

7-26) 7, 1, -3, 0, 4, -1, 2, 5, 7, 7, 3, -2, -4, -5

-5 -4 -3 -2 -1 0 1 2 3 4 5 7 7 7

a) median = 1.5

b) 1st Quartile = -2 3rd Quartile = 5

c) IQR = 5 - (-2) = 7

