

S-PA Pre-Algebra Session 10 7/11

1.) Estimate by clustering.

$$10.96 + 13.17 + 12.83 + 11.56 + 11.78$$

$$\text{clustered number: } \$12 * 5 = \boxed{\$60}$$

2.) Estimate

$$\begin{array}{r} 8.9 * 15.3 \\ \downarrow \quad \downarrow \\ 9 * 15 = \boxed{135} \end{array}$$

$$\begin{array}{r} 78.2 \div 9.8 \\ \downarrow \quad \downarrow \\ 80 \div 10 = \boxed{8} \end{array}$$

Find the mean, median, mode

Mean - average

Median - middle number

Mode - most frequent

23, 25, 18, 16, 21, 17

Put in order

16, 17, 18, 21, 23, 25

$$\text{Mean} - \frac{16+17+18+21+23+25}{6} = \frac{120}{6} = 20$$

$$\text{Median} - \cancel{16, 17}, \boxed{18, 21}, \cancel{23, 25} \quad \frac{18+21}{2} = \frac{39}{2} = \boxed{19.5}$$

Mode - $\boxed{\text{none}}$ even

Find mean, median, and mode

36, 30, 32, 30, 24

In order: 24, 30, 30, 32, 36

$$\text{Mean} - \frac{24 + 30 + 30 + 32 + 36}{5} = \frac{152}{5} = 30.4$$

$$\text{Median} - \boxed{30} \quad \cancel{24}, \cancel{30}, \boxed{30}, \cancel{32}, \cancel{36}$$

$$\text{Mode} - \boxed{30}$$



of ounces = x

\$3.50 for a drink

\$0.85 per ounce.

$$C = \$0.85x + \$3.50$$

$$x = \boxed{18}$$

$$C = \$0.85x + \$3.50$$

$$\$0.85(18) + \$3.50$$

$$\underbrace{\$15.30} + \$3.50 = \boxed{\$18.80}$$

$$x = 83,072$$

$$C = \$0.85x + \$3.50$$

$$\$0.85(83,072) + \$3.50$$

$$70,611.2 + 3.50 = \boxed{\$70,614.70}$$

$$F = 1.8C + 32$$

$$0^{\circ}\text{C} = 32^{\circ}\text{F}$$

35°C →

$$F = 1.8C + 32$$

$$1.8(35) + 32$$

$$63 + 32 = \boxed{95}$$

95°F

$$F = 1.8(0) + 32$$

$$\boxed{F = 32}$$

60°C

$$F = 1.8(60) + 32$$

$$108 + 32 = \boxed{140^{\circ}\text{F}}$$

\$10 entry fee \$1.50 per ticket

$$C = \$1.50t + \$10$$

t = 500 tickets

t = 20 tickets

$$\$1.50(20) + \$10$$

$$\$30 + \$10 = \boxed{\$40}$$

$$\$1.50(500) + \$10$$

$$\$750 + \$10 = \boxed{\$760}$$

$$\begin{array}{r} 8 = n - 6 \\ +6 \quad +6 \\ \hline 14 = n \end{array}$$

$$\begin{array}{r} 8.2 = n - 6.6 \\ +6.6 \quad +6.6 \\ \hline 14.8 = n \end{array}$$

$$\begin{array}{r} 12.5 + x = 7.2 \\ -12.5 \quad -12.5 \end{array}$$

$$x = -5.3$$

$$0.3(-5) = \left(\frac{k}{0.3}\right)0.3$$

$$-1.5 = k$$

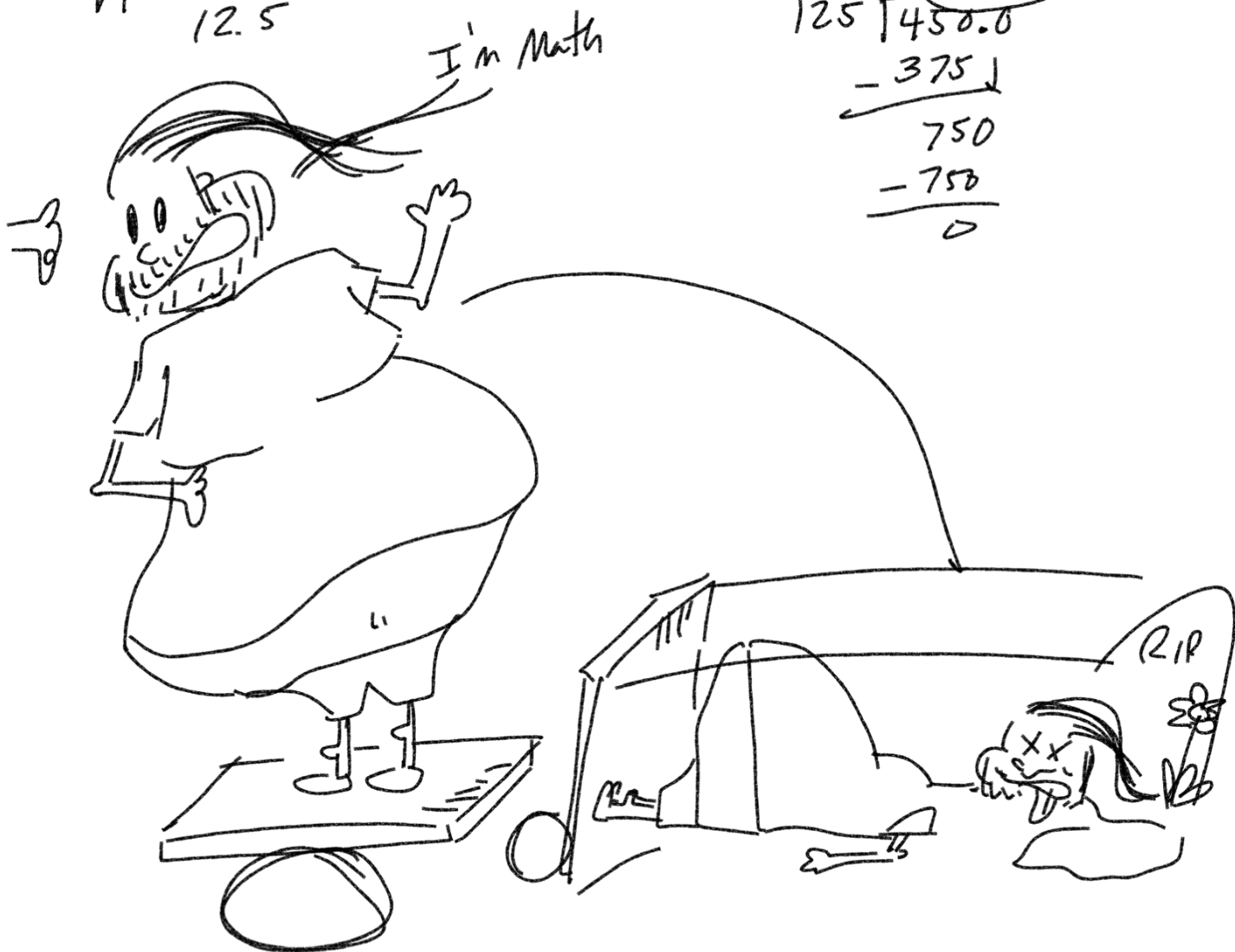
$$\frac{12.5n}{12.5} = \frac{45}{12.5}$$

$$n = \frac{45}{12.5} = 3.6$$

$$\rightarrow \frac{45}{12.5} = 12.5 \overline{)45.0}$$

$$\begin{array}{r} 125 \overline{)450.0} \\ \underline{-375} \\ 750 \\ \underline{-750} \\ 0 \end{array}$$

3.6



$$1.) \quad X - 7.8 = 12$$

$$+ 7.8 \quad + 7.8$$

$$X = \boxed{19.8}$$

$$2.) \quad \frac{X}{3.2} = (8.1) 3.2$$

$$X = \boxed{25.92}$$

$$3.) \quad 18.4 + X = 26.1$$

$$- 18.4 \quad - 18.4$$

$$X = \boxed{7.7}$$

$$4.) \quad \frac{9.5X}{9.5} = \frac{25.5}{9.5}$$

$$X = \boxed{2.68}$$