

W-PA Pre-Algebra

Week 12 12/7

$$\begin{array}{r}
 \downarrow \\
 \$7.86 \text{ tv} \\
 \downarrow \\
 \$3.31 \text{ PS5} \\
 \downarrow \\
 + \$4.58 \text{ car} \\
 \hline
 \end{array}$$

Whole Number Rounding

\$8

\$3

\$5

$$\begin{array}{r}
 \hline
 \$16 \\
 \hline
 \end{array}$$

Front-End Estimation

$$\begin{array}{r}
 \$7.86 \longrightarrow \$0.90 \\
 \$3.31 \longrightarrow \$0.30 \\
 + \$4.58 \longrightarrow \$0.60 \\
 \hline
 \$14.
 \end{array}$$

$$\$14 + \$1.80 =$$

$$\begin{array}{r}
 \hline
 \$15.80 \\
 \hline
 \end{array}$$

Whole Number

$$\$8.63 \longrightarrow$$

\$9

$$\$5.78 \longrightarrow$$

\$6

$$+ \$3.99 \longrightarrow$$

\$4

$$\begin{array}{r}
 \hline
 \$19 \\
 \hline
 \end{array}$$

Front-End

$$\$8.63 \longrightarrow \$0.60$$

$$\$5.78 \longrightarrow \$0.80$$

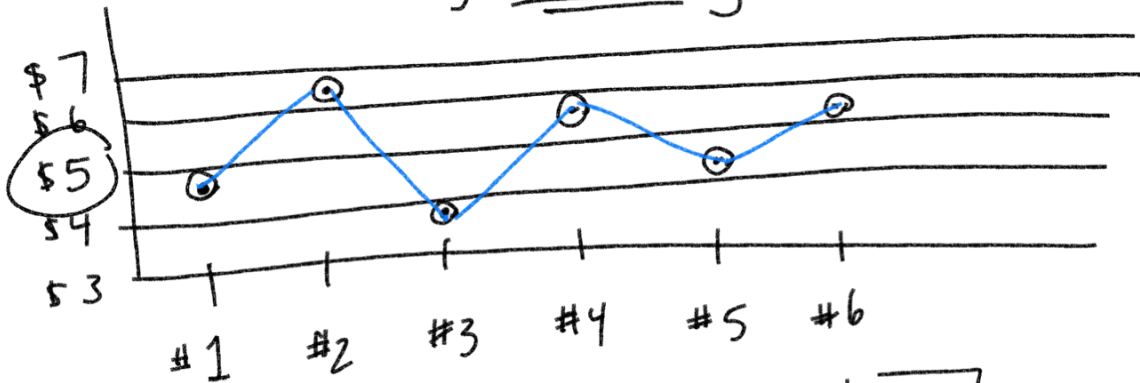
$$+ \$3.99 \longrightarrow \$1.00$$

$$\begin{array}{r}
 \$16 \\
 + \\
 \$2.40 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \hline
 \$18.40 \\
 \hline
 \end{array}$$

1	2	3	4	5	6
\$4.80	\$6.30	\$3.95	\$5.85	\$4.26	\$5.25

Estimate by clustering



$$\$5 * 6 \approx \boxed{\$30}$$

Estimate by clustering

$$\$21.40 + \$22.08 + \$18.98 + \$19.35$$

Cluster around
\$20

$$\$20 * 4 = \boxed{\$80}$$

$$\begin{array}{r} 7.8 * 11.95 \\ \downarrow \quad \downarrow \\ 8 * 12 = \boxed{96} \end{array}$$

$$\begin{array}{r} 74.8 \div 7.8 \\ \downarrow \quad \downarrow \\ 75 \div 8 = 9.375 \end{array}$$

$$\begin{array}{r} \boxed{74.8} \div 7.8 \\ \downarrow \quad \downarrow \\ \approx 72 \div 8 = \boxed{9} \end{array}$$

Round small number first, then

8, 16, 24, 32, 40, 48, 56, 64, 72, 80, adjust big one

1 2 3 4 5 6 7 8 9

$$\begin{array}{r} 82 * 8.9 \\ \downarrow \quad \downarrow \\ 80 * 9 = 720 \end{array}$$

$$\begin{array}{r} 126.2 \div 23.9 \\ \downarrow \quad \downarrow \\ 125 \div 25 = \boxed{5} \end{array}$$

$$\begin{array}{r} 126.2 \div 23.9 \\ \downarrow \quad \downarrow \\ 120 \div 24 = \boxed{5} \end{array}$$

$$\begin{array}{r} 1.) \quad 6.2 * 11.5 \\ \downarrow \quad \downarrow \\ 6 * 12 = \boxed{72} \end{array}$$

$$\begin{array}{r} 2.) \quad 14.8 * 8.2 \\ \downarrow \quad \downarrow \\ 15 * 8 = \boxed{120} \end{array}$$

$$\begin{array}{r} 3.) \quad 38.1 \div 6.3 \\ \downarrow \quad \downarrow \\ 36 \div 6 = \boxed{6} \end{array}$$

$$\begin{array}{r} 4.) \quad 121.8 \div 19.6 \\ \downarrow \quad \downarrow \\ 120 \div 20 = \boxed{6} \end{array}$$

Mean Median Mode

Mean - Average

$$\frac{\text{sum of all numbers}}{\text{how many numbers}}$$

Median - Middle number
(odd)

Average of the
middle two numbers
(even)

Mode - most frequent number

#1: Put in order.

~~6~~, ~~3~~, ~~3~~, ~~12~~, ~~2~~, ~~36~~, ~~15~~, ~~20~~, ~~40~~

in order

~~2~~, ~~3~~, ~~3~~, ~~6~~, 12, ~~15~~, ~~20~~, ~~36~~, ~~40~~
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

$$\text{Mean: } \frac{2+3+3+6+12+15+20+36+40}{9} = \frac{137}{9} = \boxed{15.\bar{2}}$$

Median: 12

Mode: 3

14, 8, 12, 14, 8, 20, 8, 16

Mean: $\frac{8+8+8+12+14+14+16+20}{8} = \frac{100}{8} = \boxed{12.5}$

In order ~~8, 8, 8, 12, 14, 14, 16, 20~~

Median: $\frac{12+14}{2} = \frac{26}{2} = \boxed{13}$

Mode: $\boxed{8}$