

TH-PA Pre-Algebra Week 12 12/8

Whole Number Rounding

↓		
\$7.86	Monopoly	→ \$8
↓		
\$3.31	Candy Land	→ \$3
↓		
\$4.58	Pepsi	→ + \$5
		$\begin{array}{r} + \\ \hline \$16 \end{array}$

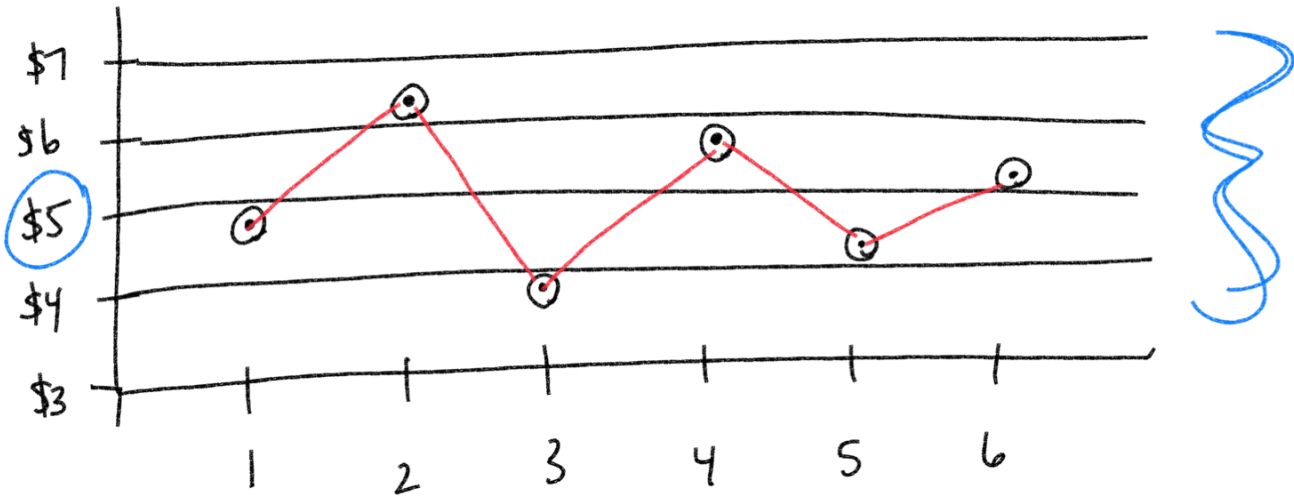
Front-End Estimation

\$7.86	Monopoly	→ \$0.90	
\$3.31	Candy Land	→ \$0.30	
\$4.58	Pepsi	→ + \$0.60	
\$14		$\begin{array}{r} + \\ \hline \$1.80 \end{array}$	$\begin{array}{r} \$14 + \$1.80 = \\ \hline \$15.80 \end{array}$

<u>Whole Number</u>	<u>Front-End</u>
\$8.63 → \$9	\$8.63 → \$0.60
\$5.78 → \$6	\$5.78 → \$0.80
\$3.99 → \$4	\$3.99 → \$1.00
$\begin{array}{r} + \\ \hline \$19 \end{array}$	$\begin{array}{r} + \\ \hline \$2.40 \end{array}$
	$\begin{array}{r} \$16 + \$2.40 = \\ \hline \$18.40 \end{array}$

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

Estimate by clustering



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

Estimate by clustering

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

cluster around \$20

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

$$7.8 * 11.95$$

$$\begin{array}{c} \downarrow \quad \downarrow \\ \textcircled{8 * 12} = \boxed{96} \end{array}$$

$$74.8 \div 7.8$$

$$\begin{array}{c} \downarrow \quad \downarrow \\ 75 \div 8 = \cancel{9.375} \end{array}$$

Round the smaller number first

$$74.8 \div 7.8$$

$$\begin{array}{c} \downarrow \quad \downarrow \\ 72 \div 8 = \boxed{9} \end{array}$$

8, 16, 24, 32, 40, 48, 56, 64, 72, 80

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

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

24, 48, 72, 96, 120

$$\begin{array}{r} \downarrow 126.2 \div 23.9 \downarrow \\ \downarrow \quad \downarrow \\ 120 \div \cancel{20} = \cancel{6} \end{array}$$

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

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

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

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

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

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

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

1st: Put in
order

⇒ In order

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

$$\text{Mean: } \frac{2 + 3 + 3 + 6 + 12 + 15 + 20 + 36 + 40}{9} = \frac{137}{9} = \boxed{15.2}$$

$$\text{Median: } \boxed{12}$$

$$\text{Mode: } \boxed{3}$$

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

~~8, 8, 8, 12, 14, 14, 20~~

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

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

$$\text{Mode} : \boxed{8}$$