

Unit 4

Embedded Assessment - p.273 "An Ice Cream Treat"

- ① What is % of ^(whole) total number of coupons sent out Oct. through Dec.?
(part)

To find "whole" add all club members:

Jan 6

Feb 12

Mar 18

Apr 14

May 10

June 13

July 24

Aug 11

Sept 18

Oct 14

Nov 27

Dec. + 33

200
Total

To find "part,"
add members
Oct. through
Dec.

Oct 14

Nov 27

Dec. + 33

74
part

$$\frac{\text{part}}{\text{whole}} \rightarrow \frac{74 \div 2}{200 \div 2} = \frac{37}{100} = \boxed{37\%}$$

②	#	Fraction	Decimal	%
Jan	6			
Feb	12			
Mar	18			
Apr	14			
June	13			

$$\text{Jan: } \frac{6}{200} \div 2 = \frac{3}{100} = .03 = \boxed{3\%}$$

$$\text{Feb: } \frac{12}{200} \div 2 = \frac{6}{100} = .06 = \boxed{6\%}$$

$$\text{Mar: } \frac{18}{200} \div 2 = \frac{9}{100} = .09 = \boxed{9\%}$$

$$\text{Apr: } \frac{14}{200} \div 2 = \frac{7}{100} = .07 = \boxed{7\%}$$

$$\text{June: } \frac{13}{200} = .065$$

$$\begin{array}{r} 200 \overline{) 13.000} \\ \underline{0} \\ 1300 \\ \underline{1200} \\ 1000 \\ \underline{1000} \\ 0 \end{array}$$

$$.065 \approx .07 \approx \frac{7}{100} \approx \boxed{7\%}$$

③ * 90% members brought family member who spent \$18.

* Tax on bill 5.5%

③a Find 90% of 200 members.

$$\frac{90}{100} = \frac{x}{200}$$

$$\frac{100x}{100} = \frac{18000}{100}$$

$$x = 180 \text{ members}$$

$$\begin{aligned} \$18 \times 180 \text{ members} \\ = \$3240.00 \end{aligned}$$

Now find 5.5% of 3240.00

$$\frac{5.5}{100} = \frac{x}{3240}$$

$$\frac{100x}{100} = \frac{17,820}{100}$$

$$x = \$178.20 \text{ tax}$$

Add tax to amount spent by 180 mem.

$$\begin{aligned} \$3240.00 \\ + \end{aligned}$$

$$178.20$$

$$* \$3418.20$$

(3b) $\$5000 \div 180$

$180 \overline{) 5000}$

$27.777 \approx \$27.78$

ea. member's bill

(3c) $\frac{x}{27.78} = \frac{5.5}{100}$

$\frac{100x}{100} = \frac{152.79}{100}$

$x = 1.5279$

$x = \$1.53 \text{ tax}$

→ Add tax to each member's bill,

$\$27.78$

$+ 1.53$

☆ $\$29.31$