

B: Fractions, Decimals and Percents

I: Convert Fractions to Decimals and Percents

Fraction to Decimal Divide

$$\frac{9}{20}$$

$$9 \div 20$$

$$= 0.45$$

Decimal to Percents Multiply by 100.

$$0.45$$

$$0.45 \times 100$$

$$= 45\%$$

II: Convert Decimals to Percents ; Fractions.

Decimal to Percent Multiply by 100.

$$0.175$$

$$= 0.175 \times 100$$

$$= 17.5\%$$

Decimal to Fraction Put over "10" denominator.

$$0.175$$

↑↑↑

3 spots = 3 zeroes.

$$\frac{175}{1000} \div 25$$

* reduce.

$$\frac{7}{40}$$

III: Percents to Decimals & Fractions

Percents to Decimals ($\div 100$)

$$30\%$$
$$= 30 \div 100$$
$$= 0.30$$

Percents to Fractions (put over 100)

$$30\%$$
$$= \frac{30}{100} \quad \text{to reduce}$$

$$= \frac{3}{10}$$

Examples:

1. Convert the fraction to a decimal & a percent.

a) $\frac{1}{500}$

$$= 0.002$$

$$= 0.20\%$$

b) $\frac{80}{128}$

$$= 0.625$$

$$= 62.5\%$$

c) $\frac{6}{5}$

$$= 1.2$$

$$= 120\%$$

2. Convert each decimal to a percent & fraction.

a) 0.0083

$$= 0.83\%$$

$$= \frac{0.0083}{\uparrow\uparrow\uparrow\uparrow}$$

$$= \frac{83}{10000}$$

b) 0.658

$$= 65.8\%$$

$$= \frac{0.658}{\uparrow\uparrow\uparrow}$$

$$= \frac{658}{1000} \div 2$$

$$= \frac{329}{500}$$

c) 4.55

$$= 455\%$$

$$= \frac{4.55}{\uparrow\uparrow}$$

$$= \frac{455}{100} \div 5$$

$$= \frac{91}{20}$$

3. Convert each percent to a decimal or fraction.

a) 358%

$= 3.58$

$= \frac{358}{100}$

$= \frac{179}{50}$

b) 0.58%

$= 0.0058$

$= \frac{58}{10000}$

$= \frac{29}{5000}$

c) $78\frac{3}{4}\%$

$= \frac{315}{4}\%$

$= 78.75\%$

$= 0.7875$

$= \frac{7875}{10000}$

$= \frac{63}{80}$

Assignment Pg. 135 #4 - 9

