CH-16

PERCENT (PERCENTAGE)

classmate
Date
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Ex-16(A)

1- Express each of the following statements in percentage form.

(i) 13 out of 20

$\frac{13}{20} \times \frac{5}{100}\%$

$= 65\%$

(ii) 21 eggs out of 30 are good

$\frac{21}{30} \times \frac{100}{1}$

$= \frac{2100}{30}$

$= \frac{210}{30}$

$= 70\%$

2- Express the following fractions as percent:

(i) $\frac{3}{200}$

$= \frac{3}{200} \times \frac{2}{100}\%$

$= 6\%$

(ii) $\frac{5}{6}$

$= \frac{5}{6} \times 100$

$= \frac{5 \times 100}{6 \times 1}$

$\frac{500}{6}$

$= \frac{500 \div 2}{6 \div 2}$

$= \frac{250}{3}\%$

$= 83\frac{1}{3}\%$

(iii) $\frac{65}{80}$

$\frac{65}{80} \times 100$

$\frac{65}{80} \times \frac{100}{1}$

$= \frac{6500}{80}$

$= \frac{650}{8}$

$= \frac{650 \div 2}{8 \div 2}$

$= \frac{325}{4}$

$= 81\frac{1}{4}\%$ or 81.25%

(iv) $\frac{2}{3}$

$= \frac{2}{3} \times 100\%$

$= \frac{2}{3} \times \frac{100}{1}$

$= \frac{200}{3}$

$= 66\frac{2}{3}\%$

3- Express as percent:

(i) 0.10

$= \frac{10}{100} \times 100$

$= 10\%$

(ii) 0.02

$= \frac{2}{100} \times 100$

$= 2\%$

(iii) 0.7

$= \frac{70}{100} \times 100$

$= 70\%$

(iv) 0.15

$= \frac{15}{100} \times 100$

$= 15\%$

(v) 0.032

$= \frac{32}{1000} \times 100$

$= 3.2\%$

4- Convert into fractions in their lowest terms:

(i) 8%

$\frac{8}{100} = \frac{2}{25}$

(ii) 20%

$\frac{20}{100} = \frac{4}{20} = \frac{1}{5}$

(iii) 85%

$\frac{85}{100} = \frac{17}{20}$

(iv) 250%

$\frac{250}{100} = \frac{5}{2} = 2\frac{1}{2}$

(v) $12\frac{1}{2}\%$

$= \frac{25}{2}$

$= \frac{25}{2 \times 100}$

$= \frac{25}{200}$

$= \frac{1}{8}$

5- Express as decimal fractions:

(i) 25 %

$= \frac{25}{100}$

$= \frac{1}{4}$

$= 0.25$

(ii) 108 %

$= \frac{108}{100} = \frac{54}{50} = \frac{27}{25}$

$= 1.08$

(iii) 95 %

$= \frac{95}{100}$

$= 0.95$

(iv) 4.5 %

$= \frac{45}{10 \times 100}$

$= \frac{45}{1000}$

$= 0.045$

(v) 29.2 %

$= \frac{292}{10 \times 100}$

$= \frac{292}{1000}$

$= 0.292$

6: Express each of the following as percent:

(i) 7

$= 7 \times 100$

$= 700\%$

(ii) 2

$= 2 \times 100$

$= 200\%$

(iii) 19.5

$= \frac{195}{10} \times \frac{100}{1}$

$= 1950\%$

(iv) 5.37

$= \frac{537}{100} \times \frac{100}{1}$

$= 537\%$