## Fractions to Percentages

Aim: To know and calculate the percentages equivalent to common fractions.
In all cases round decimals to an appropriate number of decimal places. Look for any patterns or repeating (recurring) digits.
For equivalent percentages you do not know, look for patterns, use doubling and halving or divide the numerator by the denominator and multiply by 100.

1. Write all the fractions for $\frac{1}{16}$ to $\frac{15}{16}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

2. Write all the fractions for $\frac{1}{20}$ to $\frac{19}{20}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

| $\frac{1}{20}$ | $\frac{1}{10}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. Write all the fractions for $\frac{1}{12}$ to $\frac{11}{12}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

| $\frac{1}{12}$ |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |

4. Write all the fractions for $\frac{1}{9}$ to $\frac{8}{9}$. Below each write the equivalent percentage.

| $\frac{1}{9}$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |

5. Calculate the equivalent percentage to the sevenths. Answer each to 4 decimal places.

| $\frac{1}{7}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## Fractions to Percentages Answers

Aim: To know and calculate the percentages equivalent to common fractions.
In all cases round decimals to an appropriate number of decimal places. Look for any patterns or repeating (recurring) digits.
For equivalent percentages you do not know, look for patterns, use doubling and halving or divide the numerator by the denominator and multiply by 100.

1. Write all the fractions for $\frac{1}{16}$ to $\frac{15}{16}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

| $\frac{1}{16}$ | $\frac{1}{8}$ | $\frac{3}{16}$ | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{7}{16}$ | $\frac{1}{2}$ | $\frac{9}{16}$ | $\frac{5}{8}$ | $\frac{11}{16}$ | $\frac{3}{4}$ | $\frac{13}{16}$ | $\frac{7}{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $6.25 \%$ | $12.5 \%$ | $18.75 \%$ | $25 \%$ | $31.25 \%$ | $37.5 \%$ | $43.75 \%$ | $50 \%$ | $56.25 \%$ | $62.5 \%$ | $68.75 \%$ | $75 \%$ | $81.25 \%$ | $87.5 \%$ |
| 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |

2. Write all the fractions for $\frac{1}{20}$ to $\frac{19}{20}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

| $\frac{1}{20}$ | $\frac{1}{10}$ | $\frac{3}{20}$ | $\frac{1}{5}$ | $\frac{1}{4}$ | $\frac{3}{10}$ | $\frac{7}{20}$ | $\frac{2}{5}$ | $\frac{9}{20}$ | $\frac{1}{2}$ | $\frac{11}{20}$ | $\frac{3}{5}$ | $\frac{13}{20}$ | $\frac{7}{10}$ | $\frac{3}{4}$ | $\frac{4}{5}$ | $\frac{17}{20}$ | $\frac{9}{10}$ | $\frac{19}{20}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5 \%$ | $10 \%$ | $15 \%$ | $20 \%$ | $25 \%$ | $30 \%$ | $35 \%$ | $40 \%$ | $45 \%$ | $50 \%$ | $55 \%$ | $60 \%$ | $65 \%$ | $70 \%$ | $75 \%$ | $80 \%$ | $85 \%$ | $90 \%$ | $95 \%$ |

3. Write all the fractions for $\frac{1}{12}$ to $\frac{11}{12}$, writing the fraction in its smallest form. Below each write the equivalent percentage.

| $\frac{1}{12}$ | $\frac{1}{6}$ | $\frac{1}{4}$ | $\frac{1}{3}$ | $\frac{5}{12}$ | $\frac{1}{2}$ | $\frac{7}{12}$ | $\frac{2}{3}$ | $\frac{3}{4}$ | $\frac{5}{6}$ | $\frac{11}{12}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $8.33 \%$ | $16.67 \%$ | $25 \%$ | $33.33 \%$ | $41.67 \%$ | $50 \%$ | $58.33 \%$ | $66.67 \%$ | $75 \%$ | $83.33 \%$ | $91.67 \%$ |

4. Write all the fractions for $\frac{1}{9}$ to $\frac{8}{9}$. Below each write the equivalent percentage.

| $\frac{1}{9}$ | $\frac{2}{9}$ | $\frac{1}{3}$ | $\frac{4}{9}$ | $\frac{5}{9}$ | $\frac{2}{3}$ | $\frac{7}{9}$ | $\frac{8}{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11.11 \%$ | $22.22 \%$ | $33.33 \%$ | $44.44 \%$ | $55.56 \%$ | $66.67 \%$ | $77.78 \%$ | $88.89 \%$ |

5. Calculate the equivalent percentage to the sevenths. Answer each to 4 decimal places.

| $\frac{1}{7}$ | $\frac{2}{7}$ | $\frac{3}{7}$ | $\frac{4}{7}$ | $\frac{5}{7}$ | $\frac{6}{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $14.2857 \%$ | $28.5714 \%$ | $42.8571 \%$ | $57.1429 \%$ | $71.4286 \%$ | $85.7143 \%$ |

