

Review Problems: Fractions, Decimals, and Percents

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September 1, 2008

Q1. Reduce to lowest term fractions:

1. $\frac{24}{54}$
2. $\frac{36}{144}$
3. $\frac{32}{96}$
4. $\frac{21}{72}$
5. $\frac{53}{112}$

Q2. Convert to lowest term fractions with no decimals:

1. $\frac{2.1}{5}$
2. $\frac{5.5}{10}$
3. $\frac{2.25}{3}$
4. $\frac{4.3}{7}$
5. $\frac{2.01}{2.1}$

Q3. Convert to decimals:

1. $\frac{1}{4}$
2. $\frac{2}{3}$
3. $\frac{8}{11}$
4. $\frac{2}{9}$
5. $\frac{5}{6}$

Q4. Convert to mixed fractions:

1. $\frac{4}{3}$
2. $\frac{212}{3}$
3. $\frac{9}{2}$
4. $\frac{14}{5}$
5. $\frac{11}{7}$

Q5. Convert to an improper fraction:

1. $2\frac{1}{3}$
2. $4\frac{3}{4}$
3. $1\frac{2}{5}$
4. $11\frac{3}{7}$

5. $7\frac{2}{9}$

Q6. Perform the operation on the fraction and express the result in lowest term:

1. $\frac{1}{3} + \frac{3}{4}$
2. $\frac{3}{11} + \frac{5}{54}$
3. $\frac{2}{5} - \frac{3}{31}$
4. $\frac{3}{7} - \frac{9}{14}$
5. $\frac{2}{6} + \frac{3}{36}$
6. $\frac{1}{3} \times \frac{3}{4}$
7. $\frac{3}{11} \times \frac{5}{54}$
8. $\frac{2}{5} \div \frac{3}{31}$
9. $\frac{3}{7} \div \frac{9}{14}$
10. $\frac{2}{6} \times \frac{3}{36}$

Q7. Round to two decimal places:

1. 0.333
2. 0.289
3. 0.399
4. 0.999
5. 0.9119

Q8. Write in percent notation:

1. 0.333
2. $\frac{3}{4}$
3. 0.1
4. $\frac{9}{11}$
5. 0.01

Q9. Solve the following percentage problems:

1. What percent is 7 of 11?
2. 9 is 20% of what number?
3. What is 4% 1400?

Solutions:

Q1: (1) $\frac{4}{9}$, (2) $\frac{1}{4}$, (3) $\frac{1}{3}$, (4) $\frac{7}{24}$, (5) $\frac{53}{112}$

Q2: (1) $\frac{21}{50}$, (2) $\frac{11}{20}$, (3) $\frac{3}{4}$, (4) $\frac{43}{70}$, (5) $\frac{67}{70}$

Q3: (1) 0.25, (2) $0.\overline{6}$, (3) $0.\overline{72}$, (4) $0.\overline{2}$, (5) $0.8\overline{3}$

Q4: (1) $1\frac{1}{3}$, (2) $7\frac{2}{3}$, (3) $4\frac{1}{2}$, (4) $2\frac{4}{5}$, (5) $1\frac{4}{7}$

Q5: (1) $\frac{7}{3}$, (2) $\frac{19}{4}$, (3) $\frac{7}{5}$, (4) $\frac{80}{7}$, (5) $\frac{65}{9}$

Q6: (1) $\frac{13}{12}$, (2) $\frac{217}{594}$, (3) $\frac{47}{155}$, (4) $-\frac{3}{14}$, (5) $\frac{5}{12}$, (6) $\frac{1}{4}$, (7) $\frac{5}{198}$, (8) $\frac{62}{15}$, (9) $\frac{2}{3}$, (10) $\frac{1}{36}$

Q7: (1) 0.33, (2) 0.29, (3) 0.40, (4) 1.00, (5) 0.91

Q8: (1) 33.3%, (2) 75%, (3) 10%, (4) $81.\overline{81}\%$, (5) 1%

Q9: (1) $63.\overline{63}\%$, (2) 45, (3) 56