

Name Key Date Due \_\_\_\_\_  
 6th Grade MATH STUDY GUIDE Ch2 Percents  
 Complete the work inside the boxes under the problem. Circle your answer.

1. Find the GCF of 24 and 54.

6

24 ^ 4x6 2 2 3	54 ^ 6x9 2 3 3 3
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$2 \times 3 = 6$

2. Write this decimal as a fraction or mixed number in simplest form.

$$0.58 = \frac{29}{50}$$

$$\frac{58}{100} \div \frac{2}{2} = \frac{29}{50}$$

3. Write this decimal as a fraction or mixed number in simplest form.

$$1.64 = 1 \frac{16}{25}$$

$$1 \frac{64}{100} \div \frac{4}{4} = 1 \frac{16}{25}$$

4. Write this fraction or mixed number as a decimal.

$$1 \frac{3}{10} = \underline{1.3}$$

5. Write this fraction or mixed number as a decimal.

$$\frac{9}{20} = \underline{0.45}$$

$$\frac{9}{20} \times \frac{5}{5} = \frac{45}{100} = 0.45$$

6. Write this fraction or mixed number as a decimal. Round to the nearest hundredth.

$$\frac{9}{14} = \underline{0.64}$$

$$\begin{array}{r} 0.642 \\ 14 \overline{) 9.000} \\ \underline{-84} \phantom{00} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

7. Write this fraction as a percent.

$$\frac{8}{25} = \underline{32\%}$$

$$\frac{8}{25} \times \frac{4}{4} = \frac{32}{100} = 32\%$$

8. Write this fraction as a percent.

$$\frac{5}{8} = \underline{62.5\%}$$

$$\begin{array}{r} 0.625 \\ 8 \overline{) 5.000} \\ \underline{-48} \phantom{00} \\ 20 \\ \underline{-16} \\ 40 \end{array}$$

9. Write this percent as a fraction in simplest form.

$$95\% = \frac{19}{20}$$

$$\frac{95}{100} \div \frac{5}{5} = \frac{19}{20}$$

10. Write this percent as a fraction in simplest form.

$$15.5\% = \frac{31}{200}$$

$$15.5 = 0.155 = \frac{155}{1000} \div \frac{5}{5} = \frac{31}{200}$$



<p>11. Write this percent as a fraction in simplest form.</p> $0.014\% = \frac{7}{50,000}$ <p><u>0.014</u> *use place value!</p> $\frac{14}{100,000} \div \frac{2}{2} = \frac{7}{50,000}$	<p>12. Write this decimal as a percent.</p> $0.05 = 5\%$	<p>13. Write this decimal as a percent.</p> $1.67 = 167\%$
<p>14. Write this percent as a decimal.</p> $56\% = 0.56$	<p>15. Write this percent as a decimal.</p> $125\% = 1.25$	<p>16. Fill in the blank with &lt;, &gt;, or =.</p> <p>0.37...    0.35...</p> $\frac{3}{8} > \frac{5}{14}$ $8 \overline{) 3.00}$ $\begin{array}{r} 0.37 \\ -24 \\ \hline 60 \\ -56 \\ \hline 4 \end{array}$ $14 \overline{) 5.00}$ $\begin{array}{r} 0.35 \\ 42 \\ \hline 80 \\ -70 \\ \hline 10 \end{array}$
<p>17. Order these numbers from least to greatest.</p> $4\frac{2}{3}, 4\frac{5}{6}, 5\frac{1}{4} \text{ and } 4\frac{3}{8}$ <p>This has a 5 so it's biggest.</p> <p>LCD <math>\frac{2}{3}, \frac{5}{6}, \text{ and } \frac{3}{8} = 24</math>.</p> $\frac{2}{3} \times \frac{8}{8} = \frac{16}{24} \quad \frac{5}{6} \times \frac{4}{4} = \frac{20}{24} \quad \frac{3}{8} \times \frac{3}{3} = \frac{9}{24}$ $4\frac{3}{8}, 4\frac{2}{3}, 4\frac{5}{6}, 5\frac{1}{4}$	<p>18. Find 45% of 360.</p> $162.00 \text{ or } 162$ $45 \times 360$ $\begin{array}{r} 360 \\ \times 0.45 \\ \hline 1800 \\ 14400 \\ \hline 16200 \end{array}$	<p>19. What is 63% of 700?</p> $63\% \rightarrow 63 = 0.63$ $\begin{array}{r} 0.63 \\ \times 700 \\ \hline 44100 \end{array}$ <p>441</p>

20. In the first year of ownership, a new car can lose 20% of its value. How much value will a car lose in its first year if it originally costs \$21,000?

20% → 20 = 0.20 or 0.2

$$\begin{array}{r} 21,000 \\ \times 0.2 \\ \hline 4200.0 \end{array} = 4,200$$