Simplifying Fractions

Aim: use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

1. $\frac{8}{16} = \underline{\hspace{2cm}}$
2. $\frac{7}{21} = \underline{\hspace{2cm}}$

3. $\frac{9}{15} = \underline{\hspace{2cm}}$
4. $\frac{2}{10} = \underline{\hspace{2cm}}$

5. $\frac{3}{12} = \underline{\hspace{2cm}}$
6. $\frac{5}{20} = \underline{\hspace{2cm}}$

7. $\frac{8}{20} = \underline{\hspace{2cm}}$
8. $\frac{4}{6} = \underline{\hspace{2cm}}$

9. $\frac{12}{24} = \underline{\hspace{2cm}}$
10. $\frac{10}{15} = \underline{\hspace{2cm}}$

11. $\frac{4}{16} = \underline{\hspace{2cm}}$
12. $\frac{6}{12} = \underline{\hspace{2cm}}$

13. $\frac{4}{16} = \underline{\hspace{2cm}}$
14. $\frac{9}{12} = \underline{\hspace{2cm}}$

15. $\frac{6}{18} = \underline{\hspace{2cm}}$
16. $\frac{10}{30} = \underline{\hspace{2cm}}$

17. $\frac{10}{25} = \underline{\hspace{2cm}}$
18. $\frac{10}{16} = \underline{\hspace{2cm}}$

Challenge: Devise your own for a friend.
Simplifying Fractions Answer Sheet

Aim: use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

1. \( \frac{8}{16} = \frac{1}{2} \)

2. \( \frac{7}{21} = \frac{1}{3} \)

3. \( \frac{9}{15} = \frac{3}{5} \)

4. \( \frac{2}{10} = \frac{1}{5} \)

5. \( \frac{3}{12} = \frac{1}{4} \)

6. \( \frac{5}{20} = \frac{1}{4} \)

7. \( \frac{8}{20} = \frac{2}{5} \)

8. \( \frac{4}{6} = \frac{2}{3} \)

9. \( \frac{12}{24} = \frac{1}{2} \)

10. \( \frac{10}{15} = \frac{2}{3} \)

11. \( \frac{4}{16} = \frac{1}{4} \)

12. \( \frac{6}{12} = \frac{1}{2} \)

13. \( \frac{4}{16} = \frac{1}{4} \)

14. \( \frac{9}{12} = \frac{3}{4} \)

15. \( \frac{6}{18} = \frac{1}{3} \)

16. \( \frac{10}{30} = \frac{1}{3} \)

17. \( \frac{10}{25} = \frac{2}{5} \)

18. \( \frac{10}{16} = \frac{5}{8} \)

Challenge: Devise your own for a friend.
Simplifying Fractions

Aim: use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

1. \( \frac{4}{16} = \)  
2. \( \frac{14}{21} = \)

3. \( \frac{6}{15} = \)  
4. \( \frac{18}{34} = \)

5. \( \frac{9}{12} = \)  
6. \( \frac{36}{45} = \)

7. \( \frac{12}{20} = \)  
8. \( \frac{42}{64} = \)

9. \( \frac{15}{24} = \)  
10. \( \frac{15}{35} = \)

11. \( \frac{14}{16} = \)  
12. \( \frac{3}{33} = \)

13. \( \frac{9}{18} = \)  
14. \( \frac{9}{27} = \)

15. \( \frac{15}{25} = \)  
16. \( \frac{18}{54} = \)

17. \( \frac{6}{8} = \)  
18. \( \frac{42}{49} = \)

Challenge: Devise your own for a friend.
Simplifying Fractions Answer Sheet

Aim: use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

1.  \(\frac{4}{16} = \frac{1}{4}\)

2.  \(\frac{14}{21} = \frac{2}{3}\)

3.  \(\frac{6}{15} = \frac{2}{5}\)

4.  \(\frac{18}{34} = \frac{9}{17}\)

5.  \(\frac{9}{12} = \frac{3}{4}\)

6.  \(\frac{36}{45} = \frac{4}{5}\)

7.  \(\frac{12}{20} = \frac{3}{5}\)

8.  \(\frac{42}{64} = \frac{21}{32}\)

9.  \(\frac{15}{24} = \frac{5}{8}\)

10.  \(\frac{15}{35} = \frac{3}{7}\)

11.  \(\frac{14}{16} = \frac{7}{8}\)

12.  \(\frac{3}{33} = \frac{1}{11}\)

13.  \(\frac{9}{18} = \frac{1}{2}\)

14.  \(\frac{9}{27} = \frac{1}{3}\)

15.  \(\frac{15}{25} = \frac{3}{5}\)

16.  \(\frac{18}{54} = \frac{1}{3}\)

17.  \(\frac{6}{8} = \frac{3}{4}\)

18.  \(\frac{42}{49} = \frac{6}{7}\)

Challenge: Devise your own for a friend.
Simplifying Fractions

Aim: use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

1. \( \frac{15}{33} = \) 2. \( \frac{12}{15} = \) 3. \( \frac{9}{36} = \) 4. \( \frac{14}{20} = \) 5. \( \frac{115}{230} = \) 6. \( \frac{14}{49} = \) 7. \( \frac{4}{18} = \) 8. \( \frac{15}{85} = \) 9. \( \frac{6}{50} = \)

10. \( \frac{3}{4} = \) 11. \( \frac{3}{45} = \) 12. \( \frac{32}{48} = \) 13. \( \frac{35}{80} = \) 14. \( \frac{42}{4} = \) 15. \( \frac{48}{1} = \) 16. \( \frac{18}{72} = \) 17. \( \frac{28}{84} = \) 18. \( \frac{4}{4} = \)

19. \( \frac{4}{2} = \) 20. \( \frac{8}{8} = \) 21. \( \frac{12}{6} = \) 22. \( \frac{5}{1} = \) 23. \( \frac{14}{1} = \) 24. \( \frac{14}{1} = \) 25. \( \frac{14}{1} = \) 26. \( \frac{14}{1} = \) 27. \( \frac{14}{1} = \)

Challenge: Devise your own missing number questions for a friend.
## Simplifying Fractions Answer Sheet

**Aim:** use common factors to simplify fractions

Use common factors, simplify the following fractions to their simplest form:

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<tr>
<th></th>
<th>Fraction</th>
<th>Simplified Fraction</th>
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<td>(\frac{15}{33})</td>
<td>(\frac{5}{11})</td>
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<tr>
<td>2</td>
<td>(\frac{12}{15})</td>
<td>(\frac{4}{5})</td>
</tr>
<tr>
<td>3</td>
<td>(\frac{9}{36})</td>
<td>(\frac{1}{4})</td>
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<tr>
<td>4</td>
<td>(\frac{14}{20})</td>
<td>(\frac{7}{10})</td>
</tr>
<tr>
<td>5</td>
<td>(\frac{115}{230})</td>
<td>(\frac{1}{2})</td>
</tr>
<tr>
<td>6</td>
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<tr>
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<td>(\frac{1}{3})</td>
</tr>
<tr>
<td>18</td>
<td>(\frac{4}{4})</td>
<td>(\frac{1}{1})</td>
</tr>
</tbody>
</table>

Challenge: Devise your own missing number questions for a friend.