

Name \_\_\_\_\_

Date \_\_\_\_\_

Parent Signature \_\_\_\_\_

1. Find the products. This page should be completed in 3 minutes no more than 4 minutes.  
Have someone time you. Any multiplication problem you do not know quickly, practice on flash cards.

6	4	7	5	12	3	6	3	0	7	5	6	3	8
<u>x2</u>	<u>x4</u>	<u>x2</u>	<u>x4</u>	<u>x0</u>	<u>x5</u>	<u>x3</u>	<u>x8</u>	<u>x8</u>	<u>x3</u>	<u>x5</u>	<u>x4</u>	<u>x9</u>	<u>x3</u>

6	2	3	8	7	12	8	3	11	7	9	4	4	9
<u>x5</u>	<u>x12</u>	<u>x6</u>	<u>x2</u>	<u>x5</u>	<u>x1</u>	<u>x4</u>	<u>x7</u>	<u>x4</u>	<u>x6</u>	<u>x2</u>	<u>x8</u>	<u>x6</u>	<u>x3</u>

4	5	0	5	9	5	2	9	5	11	5	9	7	7
<u>x7</u>	<u>x0</u>	<u>x3</u>	<u>x8</u>	<u>x4</u>	<u>x7</u>	<u>x1</u>	<u>x5</u>	<u>x6</u>	<u>x5</u>	<u>x9</u>	<u>x8</u>	<u>x7</u>	<u>x9</u>

8	6	8	1	9	9	8	1	9	2	1	3	12	1
<u>x8</u>	<u>x6</u>	<u>x7</u>	<u>x2</u>	<u>x6</u>	<u>x9</u>	<u>x6</u>	<u>x9</u>	<u>x1</u>	<u>x5</u>	<u>x1</u>	<u>x4</u>	<u>x3</u>	<u>x3</u>

8	8	12	8	12	5	3	4	2	7	6	2	6	12
<u>x0</u>	<u>x1</u>	<u>x4</u>	<u>x9</u>	<u>x0</u>	<u>x1</u>	<u>x2</u>	<u>x0</u>	<u>x2</u>	<u>x1</u>	<u>x8</u>	<u>x6</u>	<u>x7</u>	<u>x5</u>

8	4	2	9	12	11	2	7	0	6	1	5	3	2
<u>x5</u>	<u>x1</u>	<u>x8</u>	<u>x7</u>	<u>x8</u>	<u>x6</u>	<u>x9</u>	<u>x4</u>	<u>x2</u>	<u>x9</u>	<u>x0</u>	<u>x2</u>	<u>x3</u>	<u>x4</u>

4	12	4	4	1	2	11	6	7	5	2	1	4	11
<u>x9</u>	<u>x6</u>	<u>x2</u>	<u>x3</u>	<u>x4</u>	<u>x3</u>	<u>x7</u>	<u>x1</u>	<u>x8</u>	<u>x3</u>	<u>x7</u>	<u>x8</u>	<u>x5</u>	<u>x4</u>

2. Find the quotients. This page should be completed in 3 no more than 4 minutes. Practice any problems you do not know instantly. Think of the multiplication fact family. The better you know your multiplication facts the easier division will be.

$$2)\overline{2} \quad 3)\overline{9} \quad 8)\overline{32} \quad 7)\overline{49} \quad 5)\overline{10} \quad 4)\overline{0} \quad 1)\overline{1} \quad 4)\overline{8} \quad 2)\overline{12} \quad 9)\overline{54} \quad 1)\overline{3} \quad 1)\overline{2} \quad 2)\overline{4}$$

$$8)\overline{8} \quad 7)\overline{63} \quad 8)\overline{40} \quad 5)\overline{0} \quad 4)\overline{4} \quad 4)\overline{12} \quad 9)\overline{45} \quad 9)\overline{63} \quad 6)\overline{6} \quad 3)\overline{12} \quad 1)\overline{7} \quad 3)\overline{0} \quad 1)\overline{9}$$

$$2)\overline{16} \quad 3)\overline{3} \quad 3)\overline{15} \quad 5)\overline{20} \quad 3)\overline{18} \quad 3)\overline{6} \quad 5)\overline{15} \quad 7)\overline{0} \quad 9)\overline{27} \quad 4)\overline{16} \quad 7)\overline{21} \quad 4)\overline{20} \quad 7)\overline{28}$$

$$8)\overline{16} \quad 3)\overline{21} \quad 9)\overline{18} \quad 4)\overline{24} \quad 2)\overline{6} \quad 1)\overline{8} \quad 5)\overline{35} \quad 7)\overline{35} \quad 3)\overline{27} \quad 6)\overline{36} \quad 3)\overline{24} \quad 2)\overline{0} \quad 4)\overline{32}$$

$$9)\overline{9} \quad 4)\overline{36} \quad 6)\overline{42} \quad 5)\overline{40} \quad 8)\overline{64} \quad 7)\overline{14} \quad 6)\overline{30} \quad 8)\overline{56} \quad 1)\overline{5} \quad 4)\overline{28} \quad 7)\overline{56} \quad 8)\overline{24} \quad 6)\overline{24}$$

$$81 \div 9 = \underline{\quad\quad} \quad 48 \div 6 = \underline{\quad\quad} \quad 18 \div 6 = \underline{\quad\quad} \quad 42 \div 7 = \underline{\quad\quad}$$

$$10 \div 2 = \underline{\quad\quad} \quad 54 \div 6 = \underline{\quad\quad} \quad 36 \div 9 = \underline{\quad\quad} \quad 45 \div 5 = \underline{\quad\quad}$$

$$72 \div 8 = \underline{\quad\quad} \quad 8 \div 2 = \underline{\quad\quad} \quad 72 \div 9 = \underline{\quad\quad} \quad 6 \div 1 = \underline{\quad\quad}$$

$$25 \div 5 = \underline{\quad\quad} \quad 5 \div 5 = \underline{\quad\quad} \quad 18 \div 2 = \underline{\quad\quad} \quad 30 \div 5 = \underline{\quad\quad}$$

$$12 \div 1 = \underline{\quad\quad} \quad 80 \div 8 = \underline{\quad\quad} \quad 21 \div 3 = \underline{\quad\quad} \quad 30 \div 6 = \underline{\quad\quad}$$

<p>A) <math>653 \times 29</math></p> $\begin{array}{r} \phantom{0} \times \\ 653 \\ \times 29 \\ \hline 5877 \\ +13060 \\ \hline 18937 \end{array}$	<p><math>1820 \div 28</math></p> $\begin{array}{r} \phantom{00} 65 \\ 28 \overline{)1820} \\ \underline{-168} \phantom{0} \\ 140 \\ \underline{-140} \\ 0 \end{array}$	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><math>28</math></td> <td style="width: 50%;"><math>28</math></td> </tr> <tr> <td><math>\times 6</math></td> <td><math>\times 5</math></td> </tr> <tr> <td><math>168</math></td> <td><math>140</math></td> </tr> </table>	$28$	$28$	$\times 6$	$\times 5$	$168$	$140$
$28$	$28$							
$\times 6$	$\times 5$							
$168$	$140$							

**NO CALCULATOR! SHOW ALL WORK!**

1. $975 \times 8$	2. $109 \times 7$	3. $23 \times 15$
4. $73 \times 18$	5. $471 \times 16$	6. $981 \times 65$
7. $2970 \div 5$	8. $2124 \div 4$	9. $32751 \div 9$
10. $5472 \div 19$	11. $42800 \div 25$	12. $3348 \div 31$

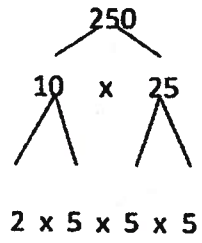
Use Euclid's Ladder (or a factor tree) to write the prime factorization.

$$\begin{array}{r} 2 \overline{)60} \\ 2 \overline{)30} \\ 3 \overline{)15} \\ 5 \end{array}$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$\begin{array}{r} 2 \overline{)250} \\ 5 \overline{)125} \\ 5 \overline{)25} \\ 5 \end{array}$$

$$125 = 2 \times 5 \times 5 \times 5 \quad \text{OR}$$



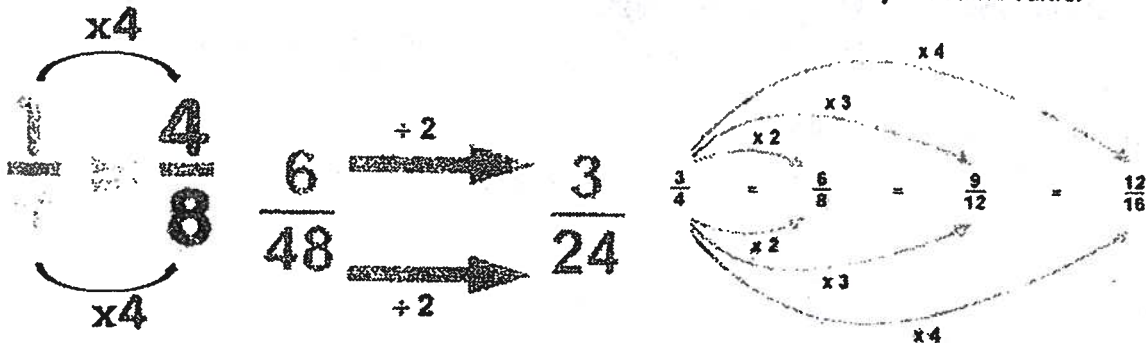
<p>1.            64</p>	<p>2.            100</p>	<p>3.            72</p>
<p>4.            48</p>	<p>5.            36</p>	<p>6.            54</p>

Find the GCF of 24 and 36.	24: 1, 2, 3, 4, 6, 8, 12, 24	GCF of 24 and 36 is 12.
	36: 1, 2, 3, 4, 6, 9, 12, 18, 36	

**No calculator! SHOW ALL WORK!**

1. 18 and 54	2. 36 and 54
3. 24 and 60	4. 32 and 56
5. 100 and 75	6. 28 and 49
7. 35 and 50	8. 64 and 88

To find an equivalent fraction multiply or divide the numerator and denominator by the same value.



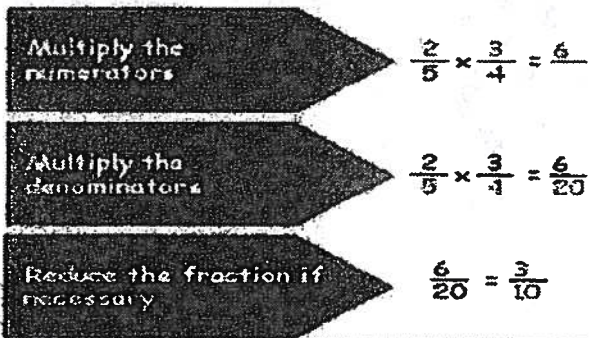
Name three equivalent fractions to the one given:

1. $\frac{4}{5}$	2. $\frac{10}{15}$
3. $\frac{1}{7}$	4. $\frac{16}{40}$
5. $\frac{12}{30}$	6. $\frac{6}{8}$
7. $\frac{2}{9}$	8. $\frac{14}{35}$
9. $\frac{18}{28}$	10. $\frac{80}{120}$

<p>Multiply the whole number by the denominator and add the numerator.</p> <p>Keep the same denominator.</p>	<p>Then add.</p> <div style="text-align: center;"> <math display="block">4 \frac{1}{3} = \frac{13}{3}</math> </div>
<p>Convert <math>\frac{20}{3}</math> to a mixed number</p> <p>Divide the numerator by the denominator</p> <p><math>20 \div 3 = 6</math> plus 2 remainder</p> <div style="text-align: center;"> <math display="block">\frac{20}{3} = 6 \frac{2}{3}</math> </div> <p>6 becomes the whole number 2 is the numerator of the fraction as shown 3 is the denominator</p>	

Convert to Mixed Number or Improper Fractions:

<p>1. <math>3 \frac{1}{2} =</math></p>	<p>2. <math>\frac{15}{2} =</math></p>
<p>3. <math>7 \frac{2}{3} =</math></p>	<p>4. <math>\frac{31}{6} =</math></p>
<p>5. <math>8 \frac{3}{5} =</math></p>	<p>6. <math>\frac{74}{9} =</math></p>
<p>7. <math>2 \frac{7}{9} =</math></p>	<p>8. <math>\frac{49}{11} =</math></p>
<p>9. <math>12 \frac{5}{10} =</math></p>	<p>10. <math>\frac{122}{13} =</math></p>



**NO CALCULATOR! SHOW ALL WORK!**

1. $\frac{1}{3} \times \frac{1}{5} =$	2. $\frac{2}{7} \times \frac{2}{5} =$	3. $\frac{4}{9} \times \frac{1}{2} =$
4. $\frac{3}{8} \times \frac{3}{4} =$	5. $\frac{9}{10} \times \frac{1}{9} =$	6. $\frac{7}{12} \times \frac{2}{5} =$
7. $\frac{6}{11} \times \frac{2}{4} =$	8. $\frac{5}{6} \times \frac{2}{9} =$	9. $\frac{12}{20} \times \frac{3}{7} =$
10. $\frac{5}{13} \times \frac{4}{6} =$	11. $\frac{15}{25} \times \frac{5}{15} =$	12. $\frac{6}{10} \times \frac{3}{9} =$