

Name: \_\_\_\_\_

Students Entering 6<sup>th</sup> Grade**Show all of your work. You may staple an additional sheet if necessary.**

1) 
$$\begin{array}{r} 574 \\ \times 121 \\ \hline \end{array}$$

2) 
$$\begin{array}{r} 139 \\ \times 41 \\ \hline \end{array}$$

3) 
$$\begin{array}{r} 309 \\ \times 212 \\ \hline \end{array}$$

4) 
$$\begin{array}{r} 704 \\ \times 30 \\ \hline \end{array}$$

5) 
$$\begin{array}{r} 54 \\ \times 61 \\ \hline \end{array}$$

6) 
$$\begin{array}{r} 18 \\ \times 19 \\ \hline \end{array}$$

7) 
$$\begin{array}{r} 50 \\ \times 60 \\ \hline \end{array}$$

8) 
$$\begin{array}{r} 43 \\ \times 16 \\ \hline \end{array}$$

9) 
$$\begin{array}{r} 61 \\ \times 15 \\ \hline \end{array}$$

10) 
$$\begin{array}{r} 37 \\ \times 10 \\ \hline \end{array}$$

11) 
$$\begin{array}{r} 424 \\ \times 15 \\ \hline \end{array}$$

12) 
$$\begin{array}{r} 794 \\ \times 20 \\ \hline \end{array}$$

13) 
$$\begin{array}{r} 1,578 \\ \div 19 \\ \hline \end{array}$$

14) 
$$\begin{array}{r} 1,159 \\ \div 15 \\ \hline \end{array}$$

15) 
$$\begin{array}{r} 3,609 \\ \div 14 \\ \hline \end{array}$$

16) 
$$\begin{array}{r} 10,512 \\ \div 12 \\ \hline \end{array}$$

17) 
$$\begin{array}{r} 3,427 \\ \div 18 \\ \hline \end{array}$$

18) 
$$\begin{array}{r} 1,693 \\ \div 18 \\ \hline \end{array}$$

19) 
$$\begin{array}{r} 96 \\ \div 32 \\ \hline \end{array}$$

20) 
$$\begin{array}{r} 205 \\ \div 41 \\ \hline \end{array}$$

**Show all of your work. You may staple an additional sheet if necessary.**

**Make factor trees and show the prime factorization for the following.**

1) 42

2) 21

3) 88

4) 56

5) 100

6) 45

7) 36

8) 12

**Tell whether each number is prime or composite.**

9) 43

10) 39

11) 18

12) 24

**Find the greatest common factor of each set of numbers.**

13) 6 and 15

14) 12 and 21

15) 9 and 12

16) 2, 6, and 24

17) 24 and 32

18) 18 and 45

**Write each fraction in lowest terms.**

19)  $\frac{2}{4}$

20)  $\frac{21}{28}$

21)  $\frac{64}{100}$

22)  $\frac{48}{50}$

23)  $\frac{100}{150}$

24)  $\frac{60}{125}$

**Show all of your work. You may staple an additional sheet if necessary.**

1) 
$$\begin{array}{r} 16.9 \\ - 7.0 \\ \hline \end{array}$$

2) 
$$\begin{array}{r} 43.62 \\ + 12.48 \\ \hline \end{array}$$

3) 
$$\begin{array}{r} 63.2 \\ - 6.9 \\ \hline \end{array}$$

4) 
$$\begin{array}{r} 457.107 \\ - 12.104 \\ \hline \end{array}$$

5) 
$$\begin{array}{r} 36.6 \\ - 15.7 \\ \hline \end{array}$$

6) 
$$\begin{array}{r} 600.4 \\ + 12.7 \\ \hline \end{array}$$

7) 
$$\begin{array}{r} 43.182 \\ + .145 \\ \hline \end{array}$$

8) 
$$\begin{array}{r} 35.173 \\ + 1.416 \\ \hline \end{array}$$

9)  $7 + 1.43 + 6.1 + 4$

10)  $3.1 + 6.24 + 3$

**Multiply or Divide.**

11) 
$$\begin{array}{r} 7.51 \\ \times 5 \\ \hline \end{array}$$

14) 
$$\begin{array}{r} 0.63 \\ \div 6 \\ \hline \end{array}$$

15) 
$$\begin{array}{r} 0.424 \\ \times 0.4 \\ \hline \end{array}$$

16) 
$$\begin{array}{r} 21.364 \\ \div 7 \\ \hline \end{array}$$

17) 
$$\begin{array}{r} 0.76 \\ \times 4 \\ \hline \end{array}$$

18) 
$$\begin{array}{r} 2.214 \\ \div 9 \\ \hline \end{array}$$

19) 
$$\begin{array}{r} 5.6 \\ \div 8 \\ \hline \end{array}$$

20) 
$$\begin{array}{r} 25.72 \\ \times 4.3 \\ \hline \end{array}$$

21)  $10 \times 0.63$

22)  $7.51 \times 100$

23)  $1000 \times 2.214$

24)  $0.32 \div 10$

25)  $6.9 \div 100$

**Show all of your work. You may staple an additional sheet if necessary.**

**Adding & Subtracting fractions and mixed numbers, *Write answers in lowest terms.***

$$1) \quad \frac{9}{21}$$

$$\underline{+ \frac{1}{6}}$$

$$2) \quad \frac{1}{6}$$

$$\underline{+ \frac{2}{5}}$$

$$3) \quad \frac{2}{3}$$

$$\underline{+ \frac{1}{5}}$$

$$4) \quad \frac{5}{8}$$

$$\underline{+ \frac{1}{2}}$$

$$5) \quad \frac{2}{3}$$

$$\underline{+ \frac{4}{9}}$$

$$6) \quad \frac{4}{15}$$

$$\underline{+ \frac{2}{3}}$$

$$7) \quad \frac{5}{6}$$

$$\underline{+ \frac{5}{9}}$$

$$8) \quad 9 \frac{1}{6}$$

$$\underline{+ 2 \frac{3}{4}}$$

$$9) \quad \frac{10}{12}$$

$$\underline{- \frac{8}{12}}$$

$$10) \quad \frac{3}{4}$$

$$\underline{- \frac{7}{16}}$$

$$11) \quad \frac{9}{10}$$

$$\underline{- \frac{3}{20}}$$

$$12) \quad 2 \frac{4}{7}$$

$$\underline{- 1 \frac{3}{7}}$$

$$13) \quad 4$$

$$\underline{- 1 \frac{3}{8}}$$

$$14) \quad 4$$

$$\underline{- 1 \frac{1}{9}}$$

$$15) \quad 4 \frac{1}{6}$$

$$\underline{- 2 \frac{2}{3}}$$

$$16) \quad 2 \frac{1}{4}$$

$$\underline{- \frac{3}{5}}$$

**Show all of your work. You may staple an additional sheet if necessary.**  
**Multiply or divide. Write answers in lowest terms.**

1)  $\frac{1}{5} \times \frac{2}{3}$

2)  $\frac{1}{2} \times \frac{1}{2}$

3)  $\frac{3}{5} \times \frac{1}{8}$

4)  $4 \times \frac{2}{5}$

5)  $\frac{2}{3} \times 2\frac{3}{4}$

6)  $3\frac{1}{5} \times 3\frac{2}{3}$

7)  $\frac{3}{7} \div \frac{3}{7}$

8)  $5\frac{1}{3} \times 1\frac{1}{3}$

9)  $\frac{15}{19} \div 6$

10)  $6\frac{3}{7} \div 9$

11) Sandi can only take two CDs on vacation. She narrows her choice down to 3 rock and 4 country CDs. If she takes 1 from each type of music, how many different combinations can she make?

12)  $\frac{3}{4}$  of a whole cake was eaten on Sunday. If two pieces are eaten Monday and 3 pieces are left, how many pieces of the cake were there to start?

13) Sharon, Ken, Todd, and Mary stand in line. Sharon is not first. Mary is right before Todd. Ken is right after Sharon. In what order do they stand in line?

14) Susan ran  $5\frac{1}{4}$  miles per hour for an hour and a half. How far did she run?

15) Jeff rode his bicycle 13.3 miles on Saturday. Frank rode his bike twice as far as Jeff on Saturday, and rode 5.9 miles on Sunday. How far did Frank ride on both days?