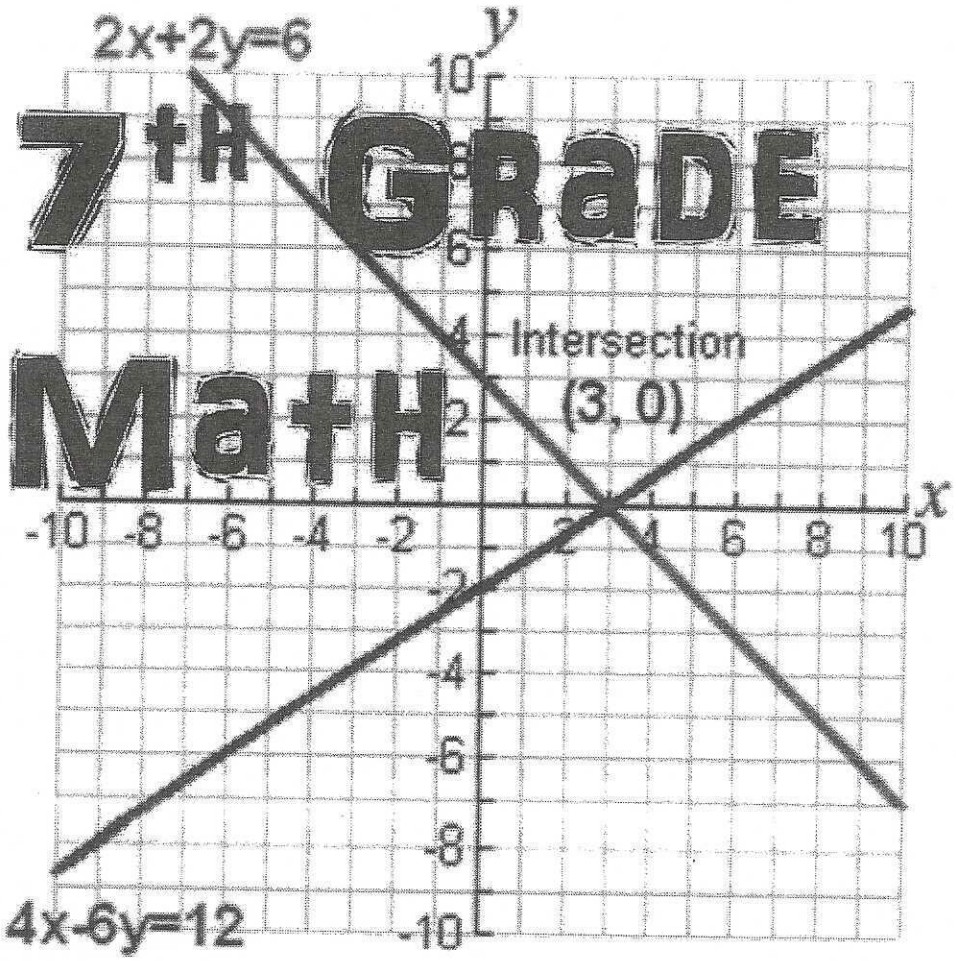
Math Entering

7th grade

Students must show work.

Calculators are NOT permitted for this assignment



Order of Operations

Parentheses (Grouping Symbols)	$[(7-4)^2+3]+15$
Exponents	$=[3^2+3]+15$
Multiply or Divide, from left to right	$=[3 \bullet 3+3]+15$
Add or Subtract, from left to right	$=[9+3]+15$
	$=12+15$
	$=27$

NO CALCULATOR!

1. $6 \div 3+2 \bullet 7$	2. $5+8 \bullet 2-4$	3. $16 \div 8 \bullet 2^2$
4. $10 \div (3+2)+9$	5. $7 \bullet [(18-6)-6]$	6. $3+(27 \div 9)-5$
7. $(5-3)^2+3$	8. $[10+(25 \bullet 2)] \div 6$	9. $(9 \bullet 2)+18 \div 6$

Decimals – Adding and Subtracting

Rules:

1) Line up decimal points, if a number does not have a decimal point it is a whole number with the decimal point at the end.
2) Annex zeros to hold place.
3) Add or subtract vertically.
4) Bring down the decimal point.

$4.1 + 3 + 5.61 + 21$

$$\begin{array}{r} 4.10 \\ 3.00 \\ 5.61 \\ \hline \end{array}$$

$16 - 7.498$

$$\begin{array}{r} 16.000 \\ -\ 7.498 \\ \hline 8.502 \end{array}$$

NO CALCULATOR! SHOW ALL WORK!

1. $42.78 + 19.56$	2. $0.0997 + 1.4$	3. $6.29 + 5$
4. $0.663 + 1.58$	5. $\$62.74 + \$1.75 + \$12$	6. $0.0674 + 0.12 + 0.0098$
7. $40.75 - 17.46$	8. $0.95 - 0.68$	9. $6 - 3.8$
10. $\$60 - \$31.74$	11. $\$12.36 - \$8.75$	12. $21.007 - 4.678$

Decimals – Multiplying and Dividing

Rules:

Multiplying

1) Line up digits, starting on the right.
2) Multiply
3) Place the decimal point in the answer by starting at the right and moving a number of places equal to the sum of the decimal places in both numbers multiplied.

(6.432)(4.15)

6.432 (3 decimal places)
x 4.15 (2 decimal places)
32160
64320
2572800
26.69280 (5 decimal places)

Dividing

1) If the divisor is not a whole number, move the decimal point To the right to make it a whole number and move the decimal Point in the dividend the same number of places.
2) Divide.
3) Bring the decimal point up.

27.216 ÷ 4.8

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   5.67
48.)272.16
  -240
   321
  -288
    336
   -336
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NO CALCULATOR! SHOW ALL WORK!

1. 5.4 x 0.07	2. 5.9 x 1.2
3. 69.3 x 0.15	4. 3.96 x 3.3

5. 9.01 x 0.48	6. 0.24 ÷ 0.8
7. 84.48 ÷ 0.88	8. 6.56 ÷ 4
9. 34.06 ÷ 0.13	10. 147 ÷ 0 .49

Multiply the whole number by the denominator and add the numerator.

Keep the same denominator.

Then add.

$4\frac{1}{3} = \frac{13}{3}$

Multiply.

Convert $\frac{20}{3}$ to a mixed number

Divide the numerator by the denominator

$20 \div 3 = 6$ plus 2 remainder

$\frac{20}{3} = 6\frac{2}{3}$

6 becomes the whole number
2 is the numerator of the fraction as shown
3 is the denominator

Convert to Mixed Number or Improper Fractions:

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

Fractions – Adding and Subtracting

$\frac{3}{4}+\frac{1}{3}=$

$\frac{9}{12}+\frac{4}{12}=$

$\frac{13}{12}=1\frac{1}{12}$

If the denominators are different, find the least common multiple of the two numbers and convert both fractions to the matching common denominator.

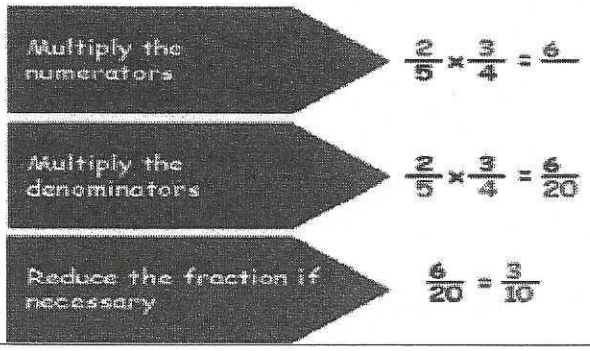
$\frac{5}{6}-\frac{3}{9}=$

$\frac{15}{18}-\frac{6}{18}=$

$\frac{11}{18}$

NO CALCULATOR! SHOW ALL WORK!

1. $\frac{2}{3}+\frac{1}{5}=$	2. $\frac{1}{7}+\frac{1}{3}=$	3. $\frac{2}{10}+\frac{1}{2}=$
4. $\frac{7}{8}-\frac{1}{2}=$	5. $\frac{5}{6}-\frac{2}{3}=$	6. $\frac{5}{9}-\frac{2}{4}=$
7. $\frac{7}{12}+\frac{2}{9}=$	8. $\frac{14}{15}+\frac{3}{5}=$	9. $\frac{9}{16}+\frac{5}{24}=$
10. $\frac{12}{16}-\frac{1}{4}=$	11. $\frac{27}{33}-\frac{5}{11}=$	12. $\frac{15}{18}-\frac{4}{9}=$



NO CALCULATOR! SHOW ALL WORK!

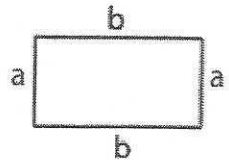
1. $\frac{1}{3} x \frac{1}{5} =$	2. $\frac{2}{7} x \frac{2}{5} =$	3. $\frac{4}{9} x \frac{1}{2} =$
4. $\frac{3}{8} x \frac{3}{4} =$	5. $\frac{9}{10} x \frac{1}{9} =$	6. $\frac{7}{12} x \frac{2}{5} =$
7. $\frac{6}{11} x \frac{2}{4} =$	8. $\frac{5}{6} x \frac{2}{9} =$	9. $\frac{12}{20} x \frac{3}{7} =$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

Perimeter:

Perimeter of a rectangle

The opposite sides of a rectangle are congruent.

$P = a + b + a + b$



$P = a + b + a + b$

Example:

If $a = 3$ units and $b = 5$ units then

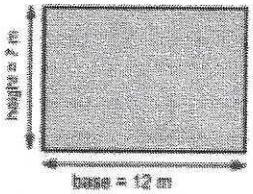
Perimeter $(P) = 3 + 5 + 3 + 5 = 16$ units

Area:

Area of Rectangle

The area of a Rectangle equals the base times the height.

$A = b \times h$

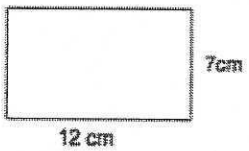


$A = b \times h$

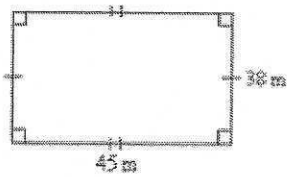
$A = 12 \times 7$

$A = 84\ m^2$

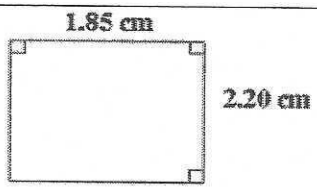
Find the perimeter and area of each shape:



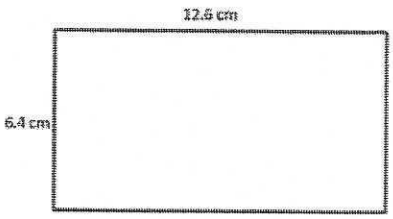
Perimeter:_____ **Area:**_____



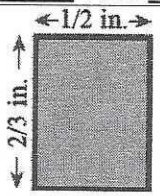
Perimeter:_____ **Area:**_____



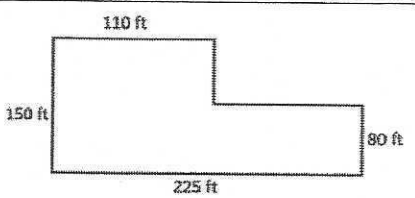
Perimeter:_____ **Area:**_____



Perimeter:_____ **Area:**_____



Perimeter:_____ **Area:**_____



Perimeter:_____ **Area:**_____