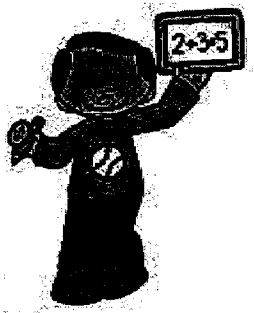
9.8 X 4.62

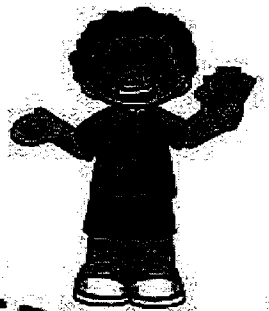


1.

1.2 ÷ 6

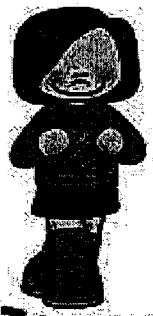
2.

7.42 X 5



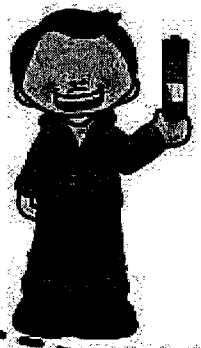
3.

0.91 X 6



4.

$9.4 \div 47$



5.

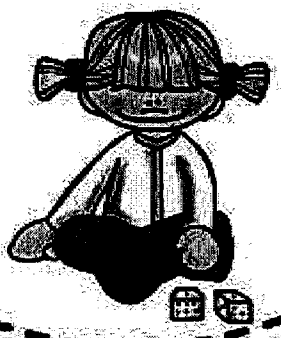
$3.7 \div 0.1$

6.

12.15×4

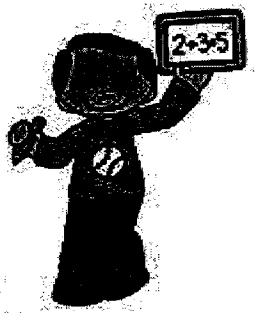
7.

1.67×4.2



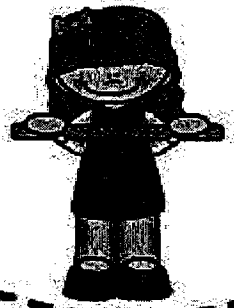
8.

3.24×7.5



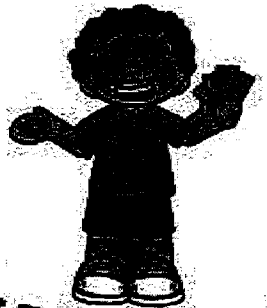
9.

$6.72 \div 2.4$



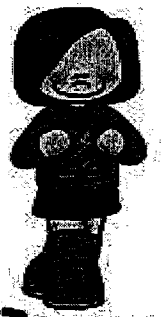
10.

$89.4 \div 12$



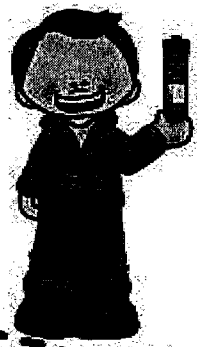
11.

0.013×7



12.

$123.25 \div 5$



13.

9.6×3.2

14.

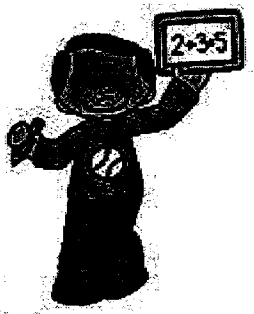
0.91×14

15.

25.2×3.4

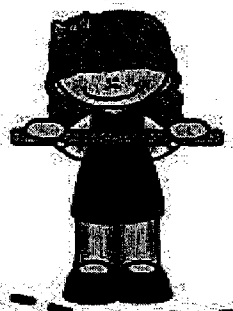
16.

$5.88 \div 12$



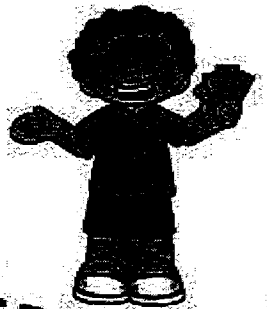
17.

$104 \div 2.5$



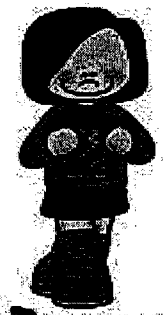
18.

9.87×1.3



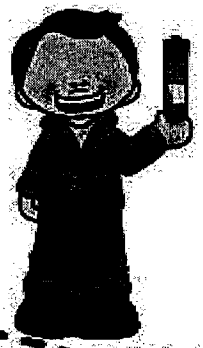
19.

11.7×81



20.

2.27×1.6

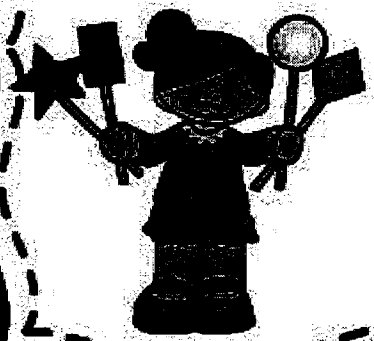


21.

$14 \div 0.07$

22.

2.16×7

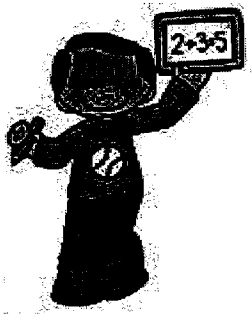


23.

$1.15 \div 25$

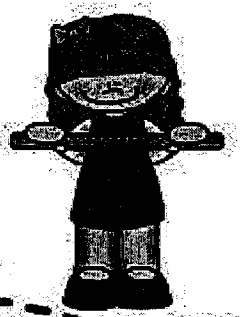
24.

2007 X 0.1



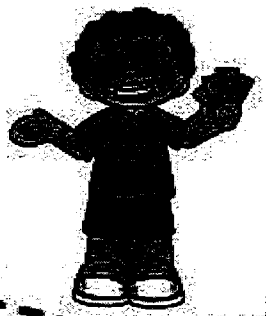
25.

2.2 ÷ 0.04



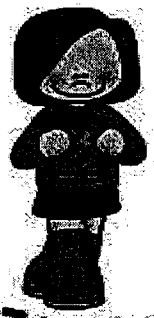
26.

8.7 X 9.6



27.

40.67 ÷ 8.3



28.

Answer Sheet

1.	2.	3.	4.	5.	6.	7.
8.	9.	10.	11.	12.	13.	14.
15.	16.	17.	18.	19.	20.	21.
22.	23.	24.	25.	26.	27.	28.

Name:

SIMPLIFYING FRACTIONS
finding & using the GCF

Directions: List the factors of both the numerator and the denominator for each fraction. Then, circle the biggest, or greatest, factor that they have in common. This is the GCF. Use the GCF to simplify your fraction by dividing both the numerator and the denominator by the GCF. Circle your fraction in its simplest form.

1. $\frac{4}{12}$ | 4: | 12: | GCF | DIVIDE

2. $\frac{6}{32}$ | 6: | 32: | GCF | DIVIDE

3. $\frac{14}{56}$ | 14: | 56: | GCF | DIVIDE

4. $\frac{8}{40}$ | 8: | 40: | GCF | DIVIDE

5. $\frac{3}{24}$ | 3: | 24: | GCF | DIVIDE

6. $\frac{9}{36}$ | 9: | 36: | GCF | DIVIDE

Name:

SIMPLIFYING FRACTIONS
finding & using the GCF

Directions: List the factors of both the numerator and the denominator for each fraction. Then, circle the biggest, or greatest, factor that they have in common. This is the GCF. Use the GCF to simplify your fraction by dividing both the numerator and the denominator by the GCF. Circle your fraction in its simplest form.

7.	$\frac{3}{15}$	3: 15:	GCF	DIVIDE
8.	$\frac{18}{40}$	18: 40:	GCF	DIVIDE
9.	$\frac{22}{30}$	22: 30:	GCF	DIVIDE
10.	$\frac{4}{16}$	4: 16:	GCF	DIVIDE
11.	$\frac{16}{50}$	16: 50:	GCF	DIVIDE
12.	$\frac{8}{108}$	8: 108:	GCF	DIVIDE

Name: _____ Date _____

EQUIVALENT FRACTIONS

Learning Goal: to make equivalent fractions by multiplying or dividing by one whole.

Example: $\frac{6}{8} \div \frac{2}{2} = \frac{3}{4}$

a) $\frac{3}{5} \times \frac{2}{2} = \frac{\quad}{\quad}$

b) $\frac{12}{14} \times \frac{2}{2} = \frac{\quad}{\quad}$

c) $\frac{2}{3} \times \frac{3}{3} = \frac{\quad}{\quad}$

d) $\frac{4}{5} \times \frac{4}{4} = \frac{\quad}{\quad}$

e) $\frac{6}{7} \times \frac{2}{2} = \frac{\quad}{\quad}$

f) $\frac{10}{12} \div \frac{2}{2} = \frac{\quad}{\quad}$

g) $\frac{12}{15} \div \frac{3}{3} = \frac{\quad}{\quad}$

h) $\frac{8}{16} \div \frac{4}{4} = \frac{\quad}{\quad}$

i) $\frac{25}{30} \div \frac{5}{5} = \frac{\quad}{\quad}$

j) $\frac{16}{20} \div \frac{2}{2} = \frac{\quad}{\quad}$

VERSION A

Name: _____

MULTI-STEP EQUATIONS WITH VARIABLES ON BOTH SIDES

Worksheet

1. Solve the equation. Show all work. $3(2x + 1) = 2x - 1$	2. Solve the equation. Show all work. $2(3x + 10) = 3x + 8$
3. Solve the equation. Show all work. $5x + 7 = 2(2x - 3)$	4. Solve the equation. Show all work. $4(2 + 2x) = 3x - 17$
5. Solve the equation. Show all work. $5(2x - 1) = 13 + 8x$	6. Solve the equation. Show all work. $4x - 6 = 2(x + 4)$

7. Solve the equation. Show all work.

$$7(x + 7) = 2x + 59 + 3x$$

8. Solve the equation. Show all work.

$$60 + 14x - 20 = 2(-4x - 13)$$

9. Solve the equation. Show all work.

$$5(x + 1) = 9x + 3 - 3x$$

10. Solve the equation. Show all work.

$$16x = 2 + 5(4 + x)$$

11. Solve the equation. Show all work.

$$10(2x + 7) + 2x = 5 + 17x - 100$$

12. Solve the equation. Show all work.

$$x + 4(3 + x) = 2(x - 4) - 1$$

VERSION B

Name: _____

MULTI-STEP EQUATIONS WITH VARIABLES ON BOTH SIDES

Worksheet

1. Solve the equation. Show all work.

$$7x - 4 - 4x = 2(x + 4) - 5x$$

2. Solve the equation. Show all work.

$$5x - (x - 4) = -19 + x - 1$$

3. Solve the equation. Show all work.

$$6(2x + 10) = 5(x + 5)$$

4. Solve the equation. Show all work.

$$-2x - 3(2x + 5) = 10x + 13 - 20x$$

5. Solve the equation. Show all work.

$$8(x - 1) - 6x = 2x - 7 + 2x$$

6. Solve the equation. Show all work.

$$-(x - 4) - x = 14x - 4(5x - 7)$$

7. Solve the equation. Show all work.

$$5(1.2x + 6) = 10x + 34.4 - 2.9x$$

8. Solve the equation. Show all work.

$$7(x + 1) - 3.3x = 2(4x - 9.7) + 0.1x$$

9. Solve the equation. Show all work.

$$\frac{1}{8}(5x + 64) = \frac{1}{4}(20 + 2x)$$

10. Solve the equation. Show all work.

$$14 - \frac{1}{5}(x - 10) = \frac{2}{5}(25 + x)$$

11. Mia solved the equation below. Did she make a mistake? If so, explain her mistake and how she could have fixed it with at least one complete sentence.

$$7 - 3(2 - x) = 4x$$
$$4(2 - x) = 4x$$
$$8 - 4x = 4x$$
$$+4x \quad +4x$$
$$8 = 8x$$
$$\frac{8}{8} \quad \frac{8}{8}$$
$$1 = x$$

12. Avery solved the equation below. Did she make a mistake? If so, explain her mistake and how she could have fixed it with at least one complete sentence.

$$4x - 8 + 3x = 5(x + 4)$$
$$x - 8 = 5x + 20$$
$$-x \quad -x$$
$$-8 = 4x + 20$$
$$-20 \quad -20$$
$$\frac{-28}{4} = \frac{4x}{4}$$
$$-7 = x$$

EQUATION PUZZLE 1

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$4a + 5 = -7$	$a =$
$a(7 - b) = 12$	$b =$
$-2c + b = 29$	$c =$
$8(d - c) = 32$	$d =$
$5e + d = -65$	$e =$

EQUATION PUZZLE 2

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$1.5f - 7 = -1$	$f =$
$f(g + 6) = 26$	$g =$
$-12g + h = -8.5$	$h =$
$-(h + i) = 5.5$	$i =$
$2.5j + i = 0$	$j =$

EQUATION PUZZLE 3

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$\frac{3}{4}k + \frac{1}{2} = 8$	$k =$
$2(k + l) = 20\frac{1}{2}$	$l =$
$6m + l = -20\frac{3}{4}$	$m =$
$-(m - n) = -5\frac{1}{2}$	$n =$
$-3p + n = -8$	$p =$

EQUATION PUZZLE 4

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$-2(4a + 5) - 8 = 38$	$a =$
$\frac{a(b+3)}{2} + 4 = -3$	$b =$
$b(8c - 9) + 12 = -27$	$c =$
$\frac{-4(c+2d)}{-8} + 3 = 10$	$d =$
$-5(2e - 3d) + 1 = 91$	$e =$

EQUATION PUZZLE 5

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$5(3f - 0.5) - 1.6 = -56.6$	$f =$
$\frac{-4(g+3.2)}{10} + f = -5.5$	$g =$
$7(5h - 0.4) - g = 128.4$	$h =$
$\frac{6(4i+h)}{-2} + 7.2 = -3$	$i =$
$-(8j - i) + 10.4 = -35.3$	$j =$

EQUATION PUZZLE 6

Name _____

Use your equation solving skills to find the value of each variable. Use the values you calculate to help you move along in the puzzle and find all the missing variables.

$-8\left(2k + \frac{3}{4}\right) + 5 = -121$	$k =$
$\frac{\frac{1}{2}(8k+l)}{6} = 4\frac{2}{3}$	$l =$
$\frac{1}{5}(4m + l) - \frac{1}{2} = -5\frac{1}{2}$	$m =$
$\frac{10(n-m)}{1/2} + 1\frac{1}{2} = 109$	$n =$
$n(10p - 16) + 3\frac{1}{2} = \frac{1}{2}$	$p =$