

Evaluate each expression.

1. $5.983 + 2.99$	2. $224 - 56.73$	3. $6.12 - 4.923$
4. $24.5 \cdot 3.2$	5. $0.23 \cdot 7$	6. $3.86 \cdot 9.15$
7. $14.8 \div 5$	8. $46.3 \div 1.5$	9. $147 \div 2.25$
10. $24.33 - 2.5 \cdot 7$	11. $3.9 + 4.5^2$	12. $9.25(18.4 - 2 \cdot 1.2)$

Solve each word problem, showing all work.

13. Jeff had \$46.18 in his wallet Monday morning. He gave half of his money to his brother. He then bought two donuts for \$0.75 each and a cup of coffee for \$2.99. How much money did Jeff have left?	14. Five friends split a \$65.20 bill at a restaurant. They also each left \$2.75 for the tip. How much money did each person pay in all?
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Evaluate each expression.

15. $\frac{4}{5} + \frac{3}{4}$	16. $4\frac{2}{7} + 2\frac{9}{14}$	17. $8\frac{11}{12} + 9\frac{5}{18}$
18. $6 - \frac{3}{8}$	19. $8\frac{3}{5} - 2\frac{1}{3}$	20. $4\frac{1}{6} - \frac{8}{9}$
21. $\frac{4}{25} \cdot \frac{15}{16}$	22. $2\frac{3}{4} \cdot 8$	23. $6\frac{5}{8} \cdot 3\frac{1}{2}$
24. $\frac{7}{9} \div \frac{2}{3}$	25. $\frac{4}{5} \div 10$	26. $5\frac{2}{3} \div 2\frac{5}{6}$

Solve each word problem, showing all work.

27. Jaimie ran $3\frac{1}{2}$ miles on Monday. She ran half as far on Tuesday as she did on Monday. How far did Jaimie run in all on Monday and Tuesday?	28. A $5\frac{1}{2}$ quart pot is filled $\frac{2}{3}$ of the way with water. How many more quarts of water can the pot hold?
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Write each ratio in 3 ways.

29. A bank contains 15 pennies and 12 nickels. Write the ratio of nickels to pennies.	30. A bowl contains 6 apples and some bananas. If there are a total of 10 pieces of fruit, find the ratio of apples to bananas.
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Convert each rate to a unit rate.

31. \$4.25 for 64 fluid ounces	32. 297 miles on 11 gallons of gas	33. 124 feet in 10 seconds
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Complete the chart by converting each number to a percent, fraction, and/or decimal.

Fraction	Decimal	Percent
34. $\frac{3}{8}$		
35.	0.45	
36.		72%
37.	0.1	
38. $\frac{3}{200}$		

Find each percent of a number.

39. 30% of 90	40. 15% of 38	41. 50% of 86
42. 75% of 160	43. 24% of 35	44. 2% of 74

Compare the integers with $<$, $>$, or $=$.

45. $-4 \bigcirc -5$	46. $2 \bigcirc -2$	47. $ -5 \bigcirc 5 $	48. $-7 \bigcirc 6$	49. $-13 \bigcirc -9$
50. $ -7 \bigcirc -6$	51. $-17 \bigcirc -14$	52. $ -3 \bigcirc -2 $	53. $0 \bigcirc -6$	54. $ -4 \bigcirc 6 $

Graph and label each of the ordered pairs in the coordinate plane. Then state the quadrant or axis in/on which the point is located.

55. A(2, 4)	56. B(0, -3)	
57. C(1, -1)	58. D(3, 3)	
59. E(-4, 1)	60. F(2, 0)	
61. G(-3, -2)	62. H(-2, 3)	
63. I(0, 2)	64. J(-1, -4)	

Find the perimeter, area, and/or volume of the given figure.

<p>65. Find the perimeter & area:</p>	<p>66. Find the perimeter & area:</p>	<p>67. Find the perimeter & area:</p>
<p>68. Find the perimeter & area:</p>	<p>69. Find the area of a square with a perimeter of 45 cm</p>	<p>70. Find the volume:</p>

Evaluate each expression for $a = 5$, $b = 12$, $c = 10$, & $d = 2$.

71. $2b - a$	72. $d(ab - c)$	73. $3 + \frac{b}{d}$
74. $\frac{4a}{b + 4d}$	75. $2a^2 - c$	76. $b - c + d$

Solve each one-step equation.

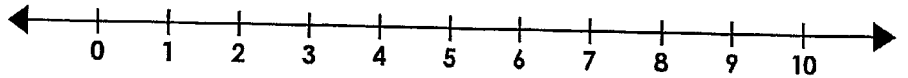
77. $g + 3 = 17$	78. $r - 6 = 7$	79. $6b = 18$	80. $\frac{h}{q} = 3$
81. $5 = f - 8$	82. $48 = 12b$	83. $a + 24 = 83$	84. $17 + x = 23$
85. $10 = \frac{m}{5}$	86. $86.5 = f - 7.63$	87. $\frac{n}{6} = 11$	88. $\frac{3}{4}h = 12$

Name: _____

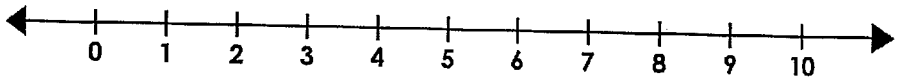
Inequalities

Graph the inequalities.

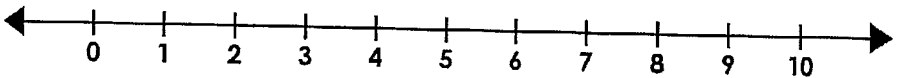
1. $z \leq 4 \times 2$



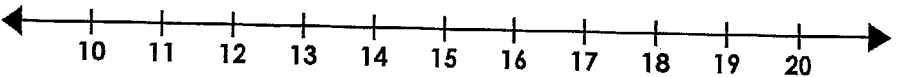
2. $s > 12 \div 3$



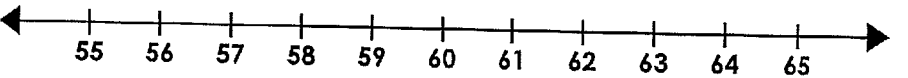
3. $3 \times 3 < t$



4. $84 \div 6 \geq n$



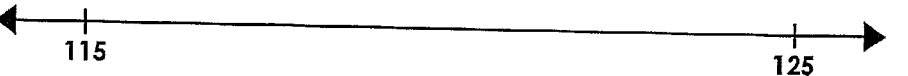
5. $e < 3 \times 20$



6. $q \leq 240 \div 5$



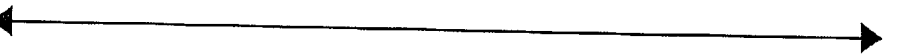
7. $11 \times 11 \geq f$



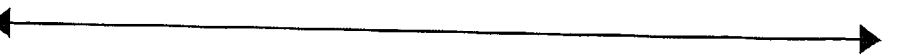
8. $d > 217 \div 7$



9. $u > 9 \times 65$



10. $2,046 \div 33 \geq i$



Name: _____

Multiplying Fractions

Step 1: Multiply the numerators. $\frac{3}{5} \times \frac{2}{3} = \frac{6}{15}$

Step 2: Multiply the denominators. $\frac{3}{5} \times \frac{2}{3} = \frac{6}{15}$

Step 3: Simplify your answer if possible. $\frac{3}{5} \times \frac{2}{3} = \frac{6}{15} = \frac{2}{5}$

a. $\frac{7}{8} \times \frac{4}{9}$

b. $\frac{4}{5} \times \frac{1}{4}$

c. $\frac{2}{9} \times \frac{1}{7}$

d. $5 \times \frac{7}{8}$

e. $\frac{2}{3} \times \frac{5}{8}$

f. $\frac{3}{4} \times 8$

g. $\frac{2}{3} \times 9$

h. $\frac{3}{7} \times \frac{5}{9}$

i. $\frac{9}{10} \times \frac{5}{18}$

j. $\frac{2}{3} \times \frac{6}{7} \times \frac{3}{5}$

k. $7 \times \frac{2}{3} \times \frac{3}{4}$

Name: _____

Improper Fractions & Mixed Numbers

Write each mixed number as an improper fraction

a. $2 \frac{1}{4} =$

b. $8 \frac{3}{8} =$

c. $2 \frac{5}{6} =$

d. $4 \frac{1}{2} =$

e. $5 \frac{1}{3} =$

f. $10 \frac{7}{12} =$

g. $9 \frac{1}{4} =$

h. $6 \frac{5}{6} =$

i. $7 \frac{5}{6} =$

j. $10 \frac{3}{7} =$

k. $11 \frac{1}{3} =$

l. $20 \frac{1}{2} =$

Write each improper fraction as a mixed number.

m. $\frac{7}{5} =$

n. $\frac{9}{4} =$

o. $\frac{5}{3} =$

p. $\frac{22}{9} =$

q. $\frac{13}{7} =$

r. $\frac{9}{2} =$

s. $\frac{17}{9} =$

t. $\frac{7}{3} =$

u. $\frac{17}{7} =$

v. $\frac{10}{3} =$



- w. Mrs. Jones bakes pies. She always cuts each pie into 8 slices. There are 13 slices left on the counter. Write the number of pies on the counter as a mixed number and as an improper fraction.
- _____

Name : _____

Score : _____

Equivalent Ratio

Sheet 1

A) Write any two equivalent ratios for each ratio.

1) 1:2

2) 4:9

3) 5:3

4) 7:10

5) 8:11

6) 12:13

7) 9:20

8) 17:5

B) Complete the equivalent ratio table.

1)

7	21	35	
3			27

2)

5		25	35
9	18		

3)

10	20	50	70
13			

4)

11	22		
2		8	16

Express each fraction as a percent.

Example

$$\frac{38}{100} = \underline{38}\%$$

3. $\frac{92}{100} = \underline{\hspace{2cm}}\%$

4. $\frac{7}{100} = \underline{\hspace{2cm}}\%$

5. $\frac{19}{100} = \underline{\hspace{2cm}}\%$

6. $\frac{6}{10} = \underline{\hspace{2cm}}\%$

7. $\frac{4}{10} = \underline{\hspace{2cm}}\%$

Express each decimal as a percent.

Example

$$\begin{aligned} 0.15 &= \frac{\boxed{15}}{100} \\ &= \underline{15}\% \end{aligned}$$

8. $0.28 = \frac{\boxed{\hspace{1cm}}}{100}$
 $= \underline{\hspace{2cm}}\%$

9. $0.07 = \underline{\hspace{2cm}}\%$

10. $0.01 = \underline{\hspace{2cm}}\%$

11. $0.08 = \underline{\hspace{2cm}}\%$

12. $0.5 = \underline{\hspace{2cm}}\%$

13. $0.9 = \underline{\hspace{2cm}}\%$

14. $0.8 = \underline{\hspace{2cm}}\%$

Express each percent as a fraction with a denominator of 100.

Example

$$53\% = \frac{\boxed{53}}{100}$$

15. $7\% = \frac{\boxed{\hspace{1cm}}}{100}$

16. $13\% = \frac{\boxed{\hspace{1cm}}}{100}$

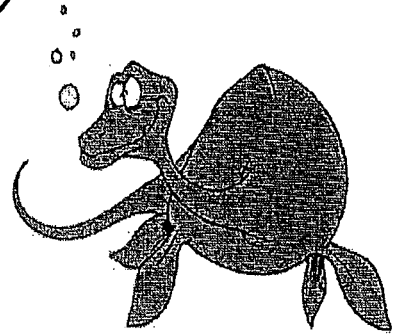
17. $31\% = \frac{\boxed{\hspace{1cm}}}{100}$

18. $5\% = \frac{\boxed{\hspace{1cm}}}{100}$

19. $79\% = \frac{\boxed{\hspace{1cm}}}{100}$

Name: _____

Basic Algebra



Determine the value of the variable in each equation.

1. $6 + a = 12$

$a = \underline{\hspace{2cm}}$

2. $7 - b = 2$

$b = \underline{\hspace{2cm}}$

3. $11 + 14 = c$

$c = \underline{\hspace{2cm}}$

4. $\frac{24}{d} = 3$

$d = \underline{\hspace{2cm}}$

5. $10e = 110$

$e = \underline{\hspace{2cm}}$

6. $\frac{f}{7} = 7$

$f = \underline{\hspace{2cm}}$

7. $13g = 26$

$g = \underline{\hspace{2cm}}$

8. $35 - h = 10$

$h = \underline{\hspace{2cm}}$

9. $6 + i = 23$

$i = \underline{\hspace{2cm}}$

10. $j - 17 = 7$

$j = \underline{\hspace{2cm}}$

11. $\frac{42}{7} = k$

$k = \underline{\hspace{2cm}}$

12. $4m = 32$

$m = \underline{\hspace{2cm}}$

13. $\frac{72}{n} = 9$

$n = \underline{\hspace{2cm}}$

14. $33 + 66 = p$

$p = \underline{\hspace{2cm}}$

15. $\frac{q}{8} = 5$

$q = \underline{\hspace{2cm}}$

★ $5 + r = 14 - 3$

$r = \underline{\hspace{2cm}}$

★ $11 + 4 = 3s$

$s = \underline{\hspace{2cm}}$