SUMMER READING PROGRAM FOR THE 4TH FORM

Read a total of 1200 pages.

REQUIRED:
Within this total of 1200 pages, every student has one required book that he or she *must* read.

THIS SUMMER: ALL must read *Robin Hood* by Roger Lancelyn Green. We will be having a book discussion on this book the first week of school in the fall.
(This book can be a part of the 1200 page total. There are copies that can be checked out from 4th form humanities, but must be returned the 2nd day of school.

Fill out the form on the back of this sheet, listing the books read.

Note: A parental signature is required.

This form will be collected on the 1st day of school, Extra credit will be given to those students who turn the form in on time.

On the second day of school, the form may be turned in without penalty, BUT no extra credit points will be offered.

After the first two days of school, summer reading forms will be counted as "late" with points being deducted from the student's grade.

How I act when I get a new book:

Additional books we strongly recommend:

- *Ender's Game*
- *The Scarlet Pimpernel*
- *Jane Eyre*
- *Pride & Prejudice*
- *The Bridge to Terabithia*
- *The Outsiders*
- *Banner in the Sky*
- *The Space Trilogy* by C.S. Lewis

Books can be read via audible or kindle, but we recommend that students have a visual copy of the book to follow along with.

This form will be collected on the first day of school.

- **On the first day of school,**
  extra credit will be given to those students who turn the form in on time.
- **On the second day of school,**
  the form may be turned in without penalty, BUT no extra credit points will be offered.
- **After the first two days of school,**
  summer reading forms will be counted as "late"--w/ points being deducted from the student's grade.

--Summer Reading Pledge and Report: 1200 Pages Total--

I have read the following books this summer:

	Title	Author	Number of Pages
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Total number of pages read:_____

Student's Signature: _____

Parent's Signature:_____

Hello favored math students!

Here is some practice to keep your skills sharp! I know that's the very thing you want over the summer, but it will help toward next year.

I recommend 3-4 pages a week to stay on track, except when you are on vacation.

Stuck? Look stuff up on Khan Academy or other math sites.

I will miss having you in class. Have a great summer!

May the Lord bless you richly in Jesus!
Mrs. Clock

PS I also built in a scavenger hunt for you - the answers are all there, but they are mixed up. You get to search for them! You're welcome:-)

Kuta Software - Infinite Pre-Algebra

Name_____

Rounding Numbers

Date_____ Period____

Round each to the place indicated.

1) 8,632,051

2) 25,952,938

3) 803,119

4) 73,693

5) 2,461,612,242

6) 789,132,377

7) 9,885,659,260; billions

8) 2,628,259; thousands

9) 347,168; ten thousands

10) 9,727,322,054; billions

11) 1,399,179; thousands

12) 271,156,694; millions

13) 44.5443495

14) 5.3373959

15) 8.7495980

16) 74.91

17) 0.72091

18) 23.0368

19) 9.3113; thousandths

20) 6.9788; tenths

21) 6.3761; tenths

22) 1.7354948; hundred-thousandths

23) 1.495485; thousandths

24) 8.121; hundredths

Write each as a fraction.

17) 25%

18) 70%

19) 93%

20) 58%

21) 50%

22) $66.\overline{6}\%$

23) 20%

24) 80%

25) 71%

26) 30%

Write each as a percent. Use repeating decimals when necessary.

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

28) $\frac{1}{8}$

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

30) $\frac{1}{100}$

31) $2\frac{1}{10}$

32) $\frac{3}{8}$

33) $\frac{1}{10}$

34) $\frac{87}{100}$

15) the quotient of a number and 6

16) v squared

17) t more than 9

18) 3 cubed

19) the quotient of 24 and 8

20) the sum of 2 and 12

21) p cubed

22) the product of 5 and x

23) 2 to the 4th

24) twice 11

Evaluate each expression.

25) 10 minus 6

26) 2 cubed

27) twice 12

28) 11 increased by 5

29) 6 times 10

30) 4 times 8

15) $11 - 4$

16) $48 - (-31)$

17) $18 - 41$

18) $(-38) - 30$

19) $(-1) - (-3)$

20) $(-1) - (-40)$

Evaluate each expression.

21) $(-10) - 47$

22) $(-29) - 29$

23) $13 + (-29)$

24) $38 + 22$

25) $(-32) - 44$

26) $(-12) + (-11)$

27) $2 + 15 + 4$

28) $16 + (-13) + 5$

29) $2 - (-9) - 8$

30) $10 + 3 - (-8)$

15) $\frac{9}{5} - \frac{5}{8}$

16) $\left(-\frac{4}{3}\right) - \left(-\frac{3}{2}\right)$

17) $(-1) + \left(-2\frac{2}{5}\right)$

18) $\left(-3\frac{3}{5}\right) - 4\frac{2}{5}$

19) $3\frac{6}{7} + \left(-1\frac{1}{7}\right)$

20) $1\frac{2}{7} + \left(-3\frac{4}{7}\right)$

21) $2\frac{1}{3} + \left(-1\frac{2}{3}\right)$

22) $\left(-1\frac{3}{4}\right) + \left(-3\frac{3}{4}\right)$

23) $\left(-1\frac{7}{8}\right) + \left(-3\frac{1}{2}\right)$

24) $\left(-2\frac{7}{8}\right) + \left(-1\frac{1}{2}\right)$

25) $\left(-2\frac{5}{6}\right) - \left(-1\frac{1}{4}\right)$

26) $\left(-3\frac{5}{8}\right) - 4\frac{2}{5}$

27) $1\frac{2}{5} - \left(-3\frac{3}{4}\right)$

28) $2\frac{4}{5} - \frac{5}{8}$

13) $6 \div -1$

14) $75 \div 15$

15) $65 \div -13$

16) $12 \div 4$

17) $-168 \div -12$

18) $-8 \div 2$

19) $\frac{-105}{7}$

20) $\frac{-4}{-1}$

21) $\frac{-10}{-2}$

22) $\frac{-144}{12}$

23) $\frac{24}{-12}$

24) $\frac{60}{-15}$

 Name_____

Multiplying/Dividing Fractions and Mixed Numbers Date_____ Period____

Find each product.

1) $-\frac{5}{4} \cdot \frac{1}{3}$

2) $\frac{8}{7} \cdot \frac{7}{10}$

3) $\frac{4}{9} \cdot \frac{7}{4}$

4) $-\frac{2}{3} \cdot \frac{5}{4}$

5) $-2 \cdot \frac{3}{7}$

6) $-2\frac{2}{3} \cdot 4\frac{1}{10}$

7) $-2\frac{1}{5} \cdot -1\frac{3}{4}$

8) $-1\frac{1}{4} \cdot 9$

9) $-1\frac{5}{7} \cdot -2\frac{1}{2}$

10) $-2\frac{3}{8} \cdot 2\frac{1}{2}$

 Name_____

Order of Operations

Date_____ Period____

Evaluate each expression.

1) $(30 - 3) \div 3$

2) $(21 - 5) \div 8$

3) $1 + 7^2$

4) $5 \times 4 - 8$

5) $8 + 6 \times 9$

6) $3 + 17 \times 5$

7) $7 + 12 \times 11$

8) $15 + 40 \div 20$

9) $20 + 16 - 15$

10) $19 - 15 - 3$

11) $9 \times (3 + 3) \div 6$

12) $(9 + 18 - 3) \div 8$

Name_____

Evaluating Variable Expressions

Date_____ Period____

Evaluate each using the values given.

1) $n^2 - m$; use $m = 7$, and $n = 8$

2) $8(x - y)$; use $x = 5$, and $y = 2$

3) $yx \div 2$; use $x = 7$, and $y = 2$

4) $m - n \div 4$; use $m = 5$, and $n = 8$

5) $x - y + 6$; use $x = 6$, and $y = 1$

6) $z + x^3$; use $x = 1$, and $z = 19$

7) $y + yx$; use $x = 15$, and $y = 8$

8) $q \div 6 + p$; use $p = 10$, and $q = 12$

9) $x + 8 - y$; use $x = 20$, and $y = 17$

10) $15 - (m + p)$; use $m = 3$, and $p = 10$

11) $10 - x + y \div 2$; use $x = 5$, and $y = 2$

12) $p - 2 + qp$; use $p = 7$, and $q = 4$

Kuta Software - Infinite Pre-Algebra

Name_____

Greatest Common Factor

Date_____ Period____

Find the GCF of each.

1) 39, 6

2) 24, 28

3) 40, 10

4) $39v$, $30uv$

5) $35n^2m$, $21m^2n$

6) $30y^3$, $20y^2$

7) 54, 45

8) 25, 55

9) 68, 34

10) 54, 27

11) 55, 75

12) $66yx$, $30x^2y$

13) $60y$, $56x^2$

14) $36xy^3$, $24y^2$

15) $18y^2$, $54y^2$

16) $80x^3$, $30yx^2$

17) $105x$, $30yx$, $75x$

18) $140n$, $140m^2$, $80m^2$

Name_____

Proportions

Date_____ Period____

State if each pair of ratios forms a proportion.

1) $\frac{4}{2}$ and $\frac{20}{6}$

2) $\frac{3}{2}$ and $\frac{18}{8}$

3) $\frac{4}{3}$ and $\frac{16}{12}$

4) $\frac{4}{3}$ and $\frac{8}{6}$

5) $\frac{12}{24}$ and $\frac{3}{4}$

6) $\frac{6}{9}$ and $\frac{2}{3}$

Solve each proportion.

7) $\frac{10}{k} = \frac{8}{4}$

8) $\frac{m}{10} = \frac{10}{3}$

9) $\frac{2}{x} = \frac{7}{9}$

10) $\frac{3}{x} = \frac{7}{10}$

 Name_____

Square Roots

Date_____ Period____

Find each square root.

1) $\sqrt{64}$

2) $\sqrt{36}$

3) $\sqrt{49}$

4) $\sqrt{0}$

5) $\sqrt{25}$

6) $\sqrt{1}$

7) $\sqrt{9}$

8) $\sqrt{4}$

Find each square root. Round to the nearest whole number.

9) $-\sqrt{200}$

10) $\sqrt{144}$

11) $-\sqrt{80}$

12) $-\sqrt{34}$

13) $-\sqrt{127}$

14) $\sqrt{1}$

15) $-\sqrt{36}$

16) $-\sqrt{148}$

Find each square root.

17) $-\sqrt{\frac{1}{4}}$

18) $\sqrt{\frac{81}{121}}$

19) $\sqrt{\frac{49}{196}}$

20) $\sqrt{\frac{81}{49}}$

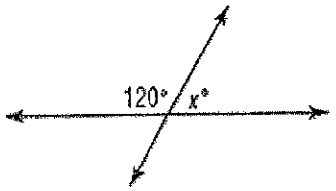
21) $-\sqrt{\frac{25}{196}}$

22) $-\sqrt{\frac{196}{225}}$

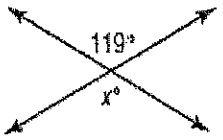
Math 8
Practice 6.1 Classify angles.

Name _____
Date: _____ Block: _____

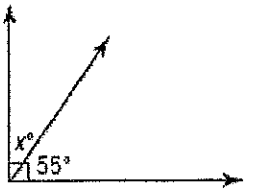
Write if angles are complementary, supplementary, or adjacent. Find the value of x in each figure.

1. 

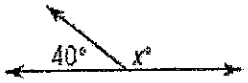
_____, x =

2. 

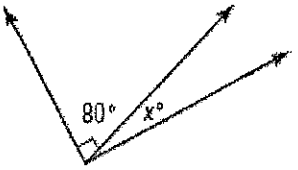
_____, x =

3. 

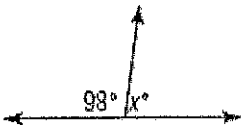
_____, x =

4. 

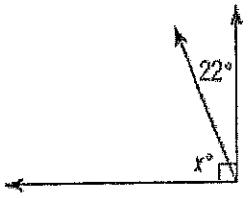
_____, x =

5. 

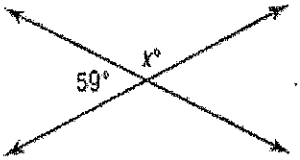
_____, x =

6. 

_____, x =

7. 

_____, x =

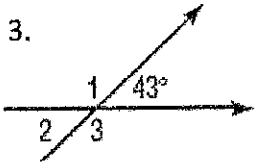
8. 

_____, x =

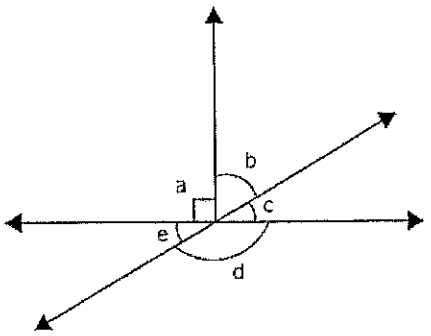
9. 

_____, x =

10. Find the measure of angles 1, 2, and 3. Explain your reasoning.



11. Name the angles:



a) Vertical: _____ and _____
b) Complementary: ∠c and _____
c) Supplementary: ∠c and _____
d) All adjacent: _____
e) Find values of all angles , if angle c is 30°: _____

Kuta Software - Infinite Pre-Algebra

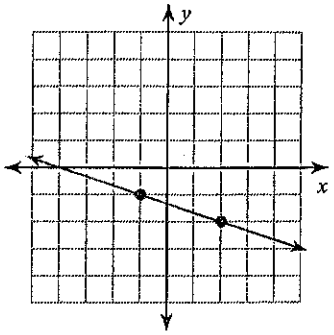
Name_____

Slope

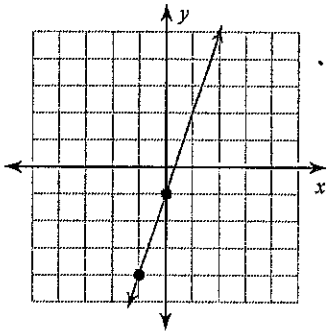
Date_____ Period____

Find the slope of each line.

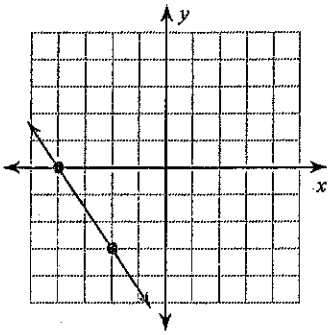
1)



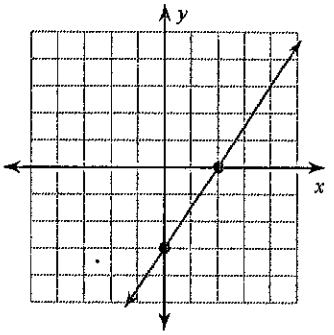
2)



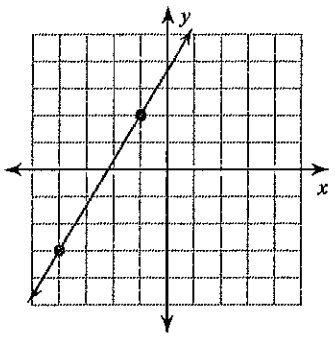
3)



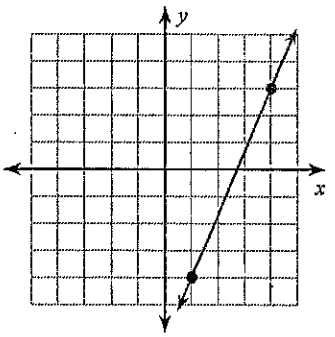
4)



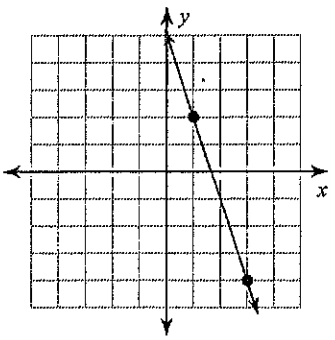
5)



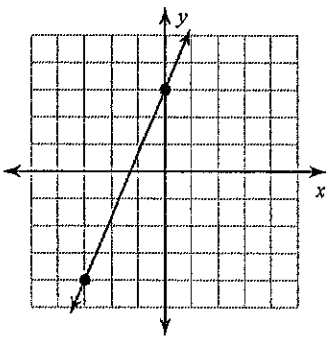
6)



7)



8)



Kuta Software - Infinite Pre-Algebra Name_____

Simplifying Variable Expressions

Date_____ Period____

Simplify each expression.

1) $-3p + 6p$

2) $b - 3 + 6 - 2b$

3) $7x - x$

4) $7p - 10p$

5) $-10v + 6v$

6) $-9r + 10r$

7) $9 + 5r - 9r$

8) $1 - 3v + 10$

9) $5n + 9n$

10) $4b + 6 - 4$

11) $35n - 1 + 46$

12) $-33v - 49v$

13) $30n + 8n$

14) $7x + 31x$

15) $10x + 36 - 38x - 47$

16) $-2(7 - n) + 4$

17) $-8(-5b + 7) + 5b$

18) $-4p - (1 - 6p)$

19) $4 - 5(-4n + 3)$

20) $-7(k - 8) + 2k$

21) $1 + 7(1 - 3b)$

22) $3 - 8(7 - 5n)$

Solving Simple Equations (A)

Name: _____ Date: _____

Determine the value of each unknown.

1. $-2 - h = -9$
2. $o + -9 = -7$
3. $-5 - d = -1$
4. $-7 - e = -1$
5. $z + -1 = 0$
6. $7 - i = 5$
7. $r + -1 = 1$
8. $f + -9 = -18$
9. $5 - j = 3$
10. $-3 - l = -2$
11. $b + -7 = -9$
12. $-3 - n = 0$
13. $-12 - p = -8$
14. $-7 - k = 2$
15. $q + -7 = 1$
16. $a + -3 = 0$
17. $w + 9 = 16$
18. $v + 5 = 8$
19. $-4 - u = 4$
20. $-3 - m = -3$

Name_____

Two-Step Equation Word Problems

Date_____ Period____

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

2) Aliyah had $24 to spend on seven pencils. After buying them she had $10. How much did each pencil cost?

3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?

4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?

5) You bought a magazine for $5 and four erasers. You spent a total of $25. How much did each eraser cost?

6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?

7) Sumalee won 40 super bouncy balls playing horseshoes at her school's game night. Later, she gave two to each of her friends. She only has 8 remaining. How many friends does she have?

8) Imani spent half of her weekly allowance playing mini-golf. To earn more money her parents let her wash the car for $4. What is her weekly allowance if she ended with $12?

 Name_____

Multiplying a Polynomial and a Monomial

Date_____ Period____

Find each product.

1) $8x(6x+6)$

2) $7n(6n+3)$

3) $3r(7r-8)$

4) $8(8k-8)$

5) $10a(a-10b)$

6) $2(9x-2y)$

7) $7x(6x+4y)$

8) $4a(8a-8b)$

9) $3n(n^2-6n+5)$

10) $2k^3(2k^2+5k-4)$

11) $8r^2(4r^2-5r+7)$

12) $3(3v^2+8v-5)$

13) $7(6x^2+9xy+10y^2)$

14) $2u(6u^2-9uv+v^2)$

15) $9(x^2+xy-8y^2)$

16) $9v^2(u^2+uv-5v^2)$

Name_____

Evaluating Variable Expressions

Date_____ Period____

Evaluate each using the values given.

1) $n^2 - m$; use $m = 7$, and $n = 8$

2) $8(x - y)$; use $x = 5$, and $y = 2$

3) $yx \div 2$; use $x = 7$, and $y = 2$

4) $m - n \div 4$; use $m = 5$, and $n = 8$

5) $x - y + 6$; use $x = 6$, and $y = 1$

6) $z + x^3$; use $x = 1$, and $z = 19$

7) $y + yx$; use $x = 15$, and $y = 8$

8) $q \div 6 + p$; use $p = 10$, and $q = 12$

9) $x + 8 - y$; use $x = 20$, and $y = 17$

10) $15 - (m + p)$; use $m = 3$, and $p = 10$

11) $10 - x + y \div 2$; use $x = 5$, and $y = 2$

12) $p - 2 + qp$; use $p = 7$, and $q = 4$

Kuta Software - Infinite Pre-Algebra Name_____

Powers of Products and Quotients

Date_____ Period____

Simplify. Your answer should contain only positive exponents.

1) $(3a^2)^3$

2) $(2n^4)^4$

3) $(3x^4)^4$

4) $(6b^2)^2$

5) $(7y^4)^2$

6) $(3ab^4)^4$

7) $(2x^4y^4)^3$

8) $(5mn^3)^3$

9) $(x^2y^2)^2$

10) $(6yx^4)^2$

11) $(u^4v^3)^2$

12) $(2x^4y^4)^4$

13) $(3x^2 \cdot 2x^2)^2$

14) $(2p^3 \cdot 2p)^2$

15) $(4n^3 \cdot n^2)^2$

16) $(3x \cdot 2x)^2$

17) $(4x^4 \cdot x^4)^3$

18) $(4n^4 \cdot n)^2$

Kuta Software - Infinite Pre-Algebra Name_____

Rounding Numbers

Date_____ Period____

Round each to the place indicated.

1) 8,632,051
9,000,000

2) 25,952,938
26,000,000

3) 803,119
803,100
100

4) 73,693
70,000

5) 2,461,612,242
2,000,000,000

6) 789,132,377
800,000,000

7) 9,885,659,260; billions
10,000,000,000

8) 2,628,259; thousands
2,628,000

9) 347,168; ten thousands
350,000

10) 9,727,322,054; billions
10,000,000,000

11) 1,399,179; thousands
1,399,000

12) 271,156,694; millions
271,000,000

13) 44.54434495
44.54435

14) 5.33739259
5.33740

15) 8.74959280
8.74960

16) 74.921
74.9

17) 0.72091
0.7209

18) 23.03568
23.037

19) 9.3113; thousandths
9.311

20) 6.9788; tenths
7.0

21) 6.3761; tenths
6.4

22) 1.7354948; hundred-thousandths
1.73549

23) 1.495485; thousandths
1.495

24) 8.121; hundredths
8.12

Kuta Software - Infinite Pre-Algebra Name_____

Fractions, Decimals, and Percents

Date_____ Period____

Write each as a decimal. Round to the thousandths place.

1) 90%
0.9

2) 30%
0.3

3) 115.9%
1.159

4) 9%
0.09

5) 7%
0.07

6) 65%
0.65

7) 0.3%
0.003

8) 445%
4.45

Write each as a percent. Round to the nearest tenth of a percent.

9) 0.452
45.2%

10) 0.006
0.6%

11) 0.002
0.2%

12) 0.05
5%

13) 4.78
478%

14) 0.1
10%

15) 3.63
363%

16) 0.03
3%

Write each as a fraction.

17) 25%
$\frac{1}{4}$

18) 70%
$\frac{7}{10}$

19) 93%
$\frac{93}{100}$

20) 58%
$\frac{29}{50}$

21) 50%
$\frac{1}{2}$

22) $66.\overline{6}\%$
$\frac{2}{3}$

23) 20%
$\frac{1}{5}$

24) 80%
$\frac{4}{5}$

25) 71%
$\frac{71}{100}$

26) 30%
$\frac{3}{10}$

Write each as a percent. Use repeating decimals when necessary.

27) $\frac{1}{2}$
50%

28) $\frac{1}{8}$
12.5%

29) $\frac{2}{3}$
$66.\overline{6}\%$

30) $\frac{1}{100}$
1%

31) $2\frac{1}{10}$
210%

32) $\frac{3}{8}$
37.5%

33) $\frac{1}{10}$
10%

34) $\frac{87}{100}$
87%

Kuta Software - Infinite Pre-Algebra Name_____

Numbers and Expressions

Date_____ Period____

Write each as a verbal expression.

1) 17 − 16
the difference of 17 and 16

2) 4 + 8
8 more than 4

3) 3^3
3 to the 3rd

4) 9 + 10
9 increased by 10

5) 4^3
4 cubed

6) 12 + 9
the sum of 12 and 9

7) 11 + 11
11 plus 11

8) 20 − 7
7 less than 20

9) 16 − 7
the difference of 16 and 7

10) 2 · 9
twice 9

11) 2^2
the 2nd power of 2

12) 21 − 8
the difference of 21 and 8

Write each as an algebraic expression.

13) 10 less than 14
14 − 10

14) half of 16
$\frac{16}{2}$

15) $\frac{9}{5} - \frac{5}{8}$

$\frac{47}{40}$

16) $\left(-\frac{4}{3}\right) - \left(-\frac{3}{2}\right)$

$\frac{1}{6}$

17) $(-1) + \left(-2\frac{2}{5}\right)$

$-3\frac{2}{5}$

18) $\left(-3\frac{3}{5}\right) - 4\frac{2}{5}$

-8

19) $3\frac{6}{7} + \left(-1\frac{1}{7}\right)$

$2\frac{5}{7}$

20) $1\frac{2}{7} + \left(-3\frac{4}{7}\right)$

$-2\frac{2}{7}$

21) $2\frac{1}{3} + \left(-1\frac{2}{3}\right)$

$\frac{2}{3}$

22) $\left(-1\frac{3}{4}\right) + \left(-3\frac{3}{4}\right)$

$-5\frac{1}{2}$

23) $\left(-1\frac{7}{8}\right) + \left(-3\frac{1}{2}\right)$

$-5\frac{3}{8}$

24) $\left(-2\frac{7}{8}\right) + \left(-1\frac{1}{2}\right)$

$-4\frac{3}{8}$

25) $\left(-2\frac{5}{6}\right) - \left(-1\frac{1}{4}\right)$

$-1\frac{7}{12}$

26) $\left(-3\frac{5}{8}\right) - 4\frac{2}{5}$

$-8\frac{1}{40}$

27) $1\frac{2}{5} - \left(-3\frac{3}{4}\right)$

$5\frac{3}{20}$

28) $2\frac{4}{5} - \frac{5}{8}$

$2\frac{7}{40}$

Kuta Software - Infinite Pre-Algebra

Name_____

Dividing Integers

Date_____ Period____

Find each quotient.

1) $35 \div -5$

-7

2) $-8 \div 4$

-2

3) $-24 \div 4$

-6

4) $-8 \div -2$

4

5) $8 \div 4$

2

6) $-24 \div 8$

-3

7) $-21 \div 7$

-3

8) $6 \div -6$

-1

9) $-132 \div -11$

12

10) $-60 \div -15$

4

11) $-52 \div -4$

13

12) $60 \div 12$

5

13) $6 \div -1$

-6

14) $75 \div 15$

5

15) $65 \div -13$

-5

16) $12 \div 4$

3

17) $-168 \div -12$

14

18) $-8 \div 2$

-4

19) $\frac{-105}{7}$

-15

20) $\frac{-4}{-1}$

4

21) $\frac{-10}{-2}$

5

22) $\frac{-144}{12}$

-12

23) $\frac{24}{-12}$

-2

24) $\frac{60}{-15}$

-4

Kuta Software - Infinite Pre-Algebra

Name_____

Multiplying Decimals

Date_____

Find each product.

1) -5.5×-4.87

26.785

2) 1.7×-2.1

-3.57

3) 0.2×-1.6

-0.32

4) 1.7×-3.1

-5.27

5) -4.6×-7.2

33.12

6) -5.928×-11.6

68.7648

7) -1.5×-7.1

10.65

8) 7.8×5.1

39.78

9) $-7.5 \times 9 \times -8.3$

560.25

10) $-4.04 \times -9 \times 3$

109.08

11) $3.2 \times 8.7 \times -1.1$

-30.624

12) $8.4 \times 8.6 \times -5.2$

-362.232

Kuta Software - Infinite Pre-Algebra

Name_____

Evaluating Variable Expressions

Date_____ Period____

Evaluate each using the values given.

1) $n^2 - m$; use $m = 7$, and $n = 8$
57

2) $8(x - y)$; use $x = 5$, and $y = 2$
24

3) $yx \div 2$; use $x = 7$, and $y = 2$
7

4) $m - n \div 4$; use $m = 5$, and $n = 8$
3

5) $x - y + 6$; use $x = 6$, and $y = 1$
11

6) $z + x^3$; use $x = 1$, and $z = 19$
20

7) $y + yx$; use $x = 15$, and $y = 8$
128

8) $q \div 6 + p$; use $p = 10$, and $q = 12$
12

9) $x + 8 - y$; use $x = 20$, and $y = 17$
11

10) $15 - (m + p)$; use $m = 3$, and $p = 10$
2

11) $10 - x + y \div 2$; use $x = 5$, and $y = 2$
6

12) $p - 2 + qp$; use $p = 7$, and $q = 4$
33

13) $zy \div 4y$; use $y = 5$, and $z = 2$
30

14) $b(a + b) + a$; use $a = 9$, and $b = 4$
61

15) $p^2 \div 4 - m$; use $m = 3$, and $p = 4$
1

16) $x(y \div 3)^2$; use $x = 4$, and $y = 9$
36

17) $4 + m + n - m$; use $m = 4$, and $n = 9$
13

18) $qp + q - p$; use $p = 7$, and $q = 3$
17

19) $mn \div 6 + 10$; use $m = 7$, and $n = 6$
17

20) $h + j(j - h)$; use $h = 2$, and $j = 6$
26

21) $(b - 1)^2 + a^2$; use $a = 6$, and $b = 1$
36

22) $y(x - (9 - 4y))$; use $x = 4$, and $y = 2$
6

23) $x - (x - (x - y^3))$; use $x = 9$, and $y = 1$
8

24) $j(h - 9)^3 + 2$; use $h = 9$, and $j = 8$
2

Kuta Software - Infinite Pre-Algebra

Name_____

Greatest Common Factor

Date_____

Find the GCF of each.

1) 39, 6
3

2) 24, 28
4

3) 40, 10
10

4) $39v$, $30uv$
$3v$

5) $35n^2m$, $21m^2n$
$7nm$

6) $30y^3$, $20y^2$
$10y^2$

7) 54, 45
9

8) 25, 55
5

9) 68, 34
34

10) 54, 27
27

11) 55, 75
5

12) $66yx$, $30x^2y$
$6yx$

13) $60y$, $56x^2$
4

14) $36xy^3$, $24y^2$
$12y^2$

15) $18y^2$, $54y^2$
$18y^2$

16) $80x^3$, $30yx^2$
$10x^2$

17) $105x$, $30yx$, $75x$
$15x$

18) $140n$, $140m^2$, $80m^2$
20

Kuta Software - Infinite Pre-Algebra

Name_____

Least Common Multiple

Date_____

Find the LCM of each.

1) 10, 3
30

2) 14, 6
42

3) 15, 6
30

4) 15, 20
60

5) 27, 18
54

6) 4, 30
60

7) 24, 32
96

8) 20, 30
60

9) 24, 36
72

10) 35, 25
175

11) $18xy^2$, $15y^3$
$90xy^2$

12) $20x^3$, $16x^4$
$80x^4$

Solving Simple Equations (A) Answers

Name: _____ Date: _____

Determine the value of each unknown.

1. $-h = -9$
   $= 7$ $h = 7$

2. $o + -9 = -7$
   $o = 2$

3. $-5 - d = -1$
   $d = -4$

4. $-7 - e = -1$
   $e = -6$

5. $z + -1 = 0$
   $z = 1$

6. $7 - i = 5$
   $i = 2$

7. $r + -1 = 1$
   $r = 2$

8. $f + -9 = -18$
   $f = -9$

9. $5 - j = 3$
   $j = 2$

10. $-3 - l = -2$
    $l = -1$

11. $b + -7 = -9$
    $b = -2$

12. $-3 - n = 0$
    $n = -3$

13. $-12 - p = -8$
    $p = -4$

14. $-7 - k = 2$
    $k = -9$

15. $q + -7 = 1$
    $q = 8$

16. $a + -3 = 0$
    $a = 3$

17. $w + 9 = 16$
    $w = 7$

18. $v + 5 = 8$
    $v = 3$

19. $-4 - u = 4$
    $u = -8$

20. $-3 - m = -3$
    $m = 0$

Kuta Software - Infinite Pre-Algebra Name_____

Two-Step Equations With Integers

Date_____

Solve each equation.

1) $\frac{r}{10} + 4 = 5$
{10}

2) $\frac{n}{2} + 5 = 3$
{-4}

3) $3p - 2 = -29$
{-9}

4) $1 - r = -5$
{6}

5) $\frac{k - 10}{2} = -7$
{-4}

6) $\frac{n - 5}{2} = 5$
{15}

7) $-9 + \frac{n}{4} = -7$
{8}

8) $\frac{9 + m}{3} = 2$
{-3}

9) $\frac{-5 + x}{22} = -1$
{-17}

10) $4n - 9 = -9$
{0}

11) $\frac{x + 9}{2} = 3$
{-3}

12) $\frac{-12 + x}{11} = -3$
{-21}

13) $\frac{-4 + x}{2} = 6$
{16}

14) $-5 + \frac{n}{3} = 0$
{15}

Kuta Software - Infinite Pre-Algebra Name_____

Two-Step Equation Word Problems

Date_____ Period____

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?
54

2) Aliyah had $24 to spend on seven pencils. After buying them she had $10. How much did each pencil cost?
$2

3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?
23

4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?
14

5) You bought a magazine for $5 and four erasers. You spent a total of $25. How much did each eraser cost?
$5

6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?
37

7) Sumalee won 40 super bouncy balls playing horseshoes at her school's game night. Later, she gave two to each of her friends. She only has 8 remaining. How many friends does she have?
16

8) Imani spent half of her weekly allowance playing mini-golf. To earn more money her parents let her wash the car for $4. What is her weekly allowance if she ended with $12?
$16

Kuta Software - Infinite Pre-Algebra Name_____

Fractions, Decimals, and Percents

Date_____ Period____

Write each as a decimal. Round to the thousandths place.

1) 90%
0.9

2) 30%
0.3

3) 115.9%
1.159

4) 9%
0.09

5) 7%
0.07

6) 65%
0.65

7) 0.3%
0.003

8) 445%
4.45

Write each as a percent. Round to the nearest tenth of a percent.

9) 0.452
45.2%

10) 0.006
0.6%

11) 0.002
0.2%

12) 0.05
5%

13) 4.78
478%

14) 0.1
10%

15) 3.63
363%

16) 0.03
3%

Write each as a fraction.

17) 25%
$\frac{1}{4}$

18) 70%
$\frac{7}{10}$

19) 93%
$\frac{93}{100}$

20) 58%
$\frac{29}{50}$

21) 50%
$\frac{1}{2}$

22) $66.\overline{6}\%$
$\frac{2}{3}$

23) 20%
$\frac{1}{5}$

24) 80%
$\frac{4}{5}$

25) 71%
$\frac{71}{100}$

26) 30%
$\frac{3}{10}$

Write each as a percent. Use repeating decimals when necessary.

27) $\frac{1}{2}$
50%

28) $\frac{1}{8}$
12.5%

29) $\frac{2}{3}$
$66.\overline{6}\%$

30) $\frac{1}{100}$
1%

31) $2\frac{1}{10}$
210%

32) $\frac{3}{8}$
37.5%

33) $\frac{1}{10}$
10%

34) $\frac{87}{100}$
87%

Kuta Software - Infinite Pre-Algebra Name_____

Proportions

Date_____

State if each pair of ratios forms a proportion.

1) $\frac{4}{2}$ and $\frac{20}{6}$
No

2) $\frac{3}{2}$ and $\frac{18}{8}$
No

3) $\frac{4}{3}$ and $\frac{16}{12}$
Yes

4) $\frac{4}{3}$ and $\frac{8}{6}$
Yes

5) $\frac{12}{24}$ and $\frac{3}{4}$
No

6) $\frac{6}{9}$ and $\frac{2}{3}$
Yes

Solve each proportion.

7) $\frac{10}{k} = \frac{8}{4}$
{5}

8) $\frac{m}{10} = \frac{10}{3}$
{33.3}

9) $\frac{2}{x} = \frac{7}{9}$
{2.57}

10) $\frac{3}{x} = \frac{7}{10}$
{4.28}

Kuta Software - Infinite Pre-Algebra Name_____

Proportion Word Problems

Date_____ Period____

Answer each question and round your answer to the nearest whole number.

1) If you can buy one can of pineapple chunks for $2 then how many can you buy with $10?
5

2) One jar of crushed ginger costs $2. How many jars can you buy for $4?
2

3) One cantaloupe costs $2. How many cantaloupes can you buy for $6?
3

4) One packnge of blueberries costs $3. How many packages of blueberries can you buy for $9?
3

5) Shawna reduced the size of a rectangle to a height of 2 in. What is the new width if it was originally 24 in wide and 12 in tall?
4 in

6) Ming was planning a trip to Western Samoa. Before going, she did some research and learned that the exchange rate is 6 Tala for $2. How many Tala would she get if she exchanged $6?
18 Tala

7) Jasmine bought 32 kiwi fruit for $16. How many kiwi can Lisa buy if she has $4?
8

8) If you can buy four bulbs of elephant garlic for $8 then how many can you buy with $32?
16

9) One bunch of seedless black grapes costs $2. How many bunches can you buy for $20?
10

10) The money used in Jordan is called the Dinar. The exchange rate is $3 to 2 Dinars. Find how many dollars you would receive if you exchanged 22 Dinars.
$33

Kuta Software - Infinite Pre-Algebra

Name_____

Date_____ Period____

Two-Step Equation Word Problems

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

54

2) Aliyah had $24 to spend on seven pencils. After buying them she had $10. How much did each pencil cost?

$2

3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?

23

4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?

14

5) You bought a magazine for $5 and four erasers. You spent a total of $25. How much did each eraser cost?

$5

6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?

37

7) Sumalee won 40 super bouncy balls playing horseshoes at her school's game night. Later, she gave two to each of her friends. She only has 8 remaining. How many friends does she have?

16

8) Imani spent half of her weekly allowance playing mini-golf. To earn more money her parents let her wash the car for $4. What is her weekly allowance if she ended with $12?

$16

Kuta Software - Infinite Pre-Algebra

Name_____

Proportion Word Problems

Date_____ Peric

Answer each question and round your answer to the nearest whole number.

1) If you can buy one can of pineapple chunks for $2 then how many can you buy with $10?

5

2) One jar of crushed ginger costs $2. How many jars can you buy for $4?

2

3) One cantaloupe costs $2. How many cantaloupes can you buy for $6?

3

4) One package of blueberries costs $3. How many packages of blueberries can you buy for $9?

3

5) Shawna reduced the size of a rectangle to a height of 2 in. What is the new width if it was originally 24 in wide and 12 in tall?

4 in

6) Ming was planning a trip to Western Samoa. Before going, she did some research and learned that the exchange rate is 6 Tala for $2. How many Tala would she get if she exchanged $6?

18 Tala

7) Jasmine bought 32 kiwi fruit for $16. How many kiwi can Lisa buy if she has $4?

8

8) If you can buy four bulbs of elephant garlic for $8 then how many can you buy with $32?

16

9) One bunch of seedless black grapes costs $2. How many bunches can you buy for $20?

10

10) The money used in Jordan is called the Dinar. The exchange rate is $3 to 2 Dinars. Find how many dollars you would receive if you exchanged 22 Dinars.

$33

Kuta Software - Infinite Pre-Algebra Name_____

Adding and Subtracting Polynomials

Date_____ Peri .

Simplify each expression.

1) $(5+5n^3)-(1-3n^3)$
$8n^3+4$

2) $(6a-3a^2)+(2a^2-3a)$
$-a^2+3a$

3) $(x^2-x)+(8x-2x^2)$
$-x^2+7x$

4) $(2a^2+4a^3)-(3a^3+8)$
a^3+2a^2-8

5) $(5x^2+4)-(5+5x^3)$
$-5x^3+5x^2-1$

6) $(8n^2-2n^3)+(6n^3-8n^2)$
$4n^3$

7) $(8b^3+8)-(6-7b^3)$
$15b^3+2$

8) $(4x^3-6)+(5x^3+3)$
$9x^3-3$

9) $(10p^4+11)-(11p^4+13+16p^2)$
$-p^4-16p^2-2$

10) $(20v^2-9v^3)-(7v^3-10v^4-14v^2)$
$10v^4-15v^3+34v^2$

11) $(10x^4-16)+(12-6x^3+11x^4)$
$21x^4-6x^3-4$

12) $(14+12a^3)+(17a^4+15-5a^3)$
$17a^4+7a^3+29$

Kuta Software - Infinite Pre-Algebra Name_____

Multiplying a Polynomial and a Monomial

Date_____

Find each product.

1) $8x(6x+6)$
$48x^2+48x$

2) $7n(6n+3)$
$42n^2+21n$

3) $3r(7r-8)$
$21r^2-24r$

4) $8(8k-8)$
$64k-64$

5) $10a(a-10b)$
$10a^2-100ab$

6) $2(9x-2y)$
$18x-4y$

7) $7x(6x+4y)$
$42x^2+28xy$

8) $4a(8a-8b)$
$32a^2-32ab$

9) $3n(n^2-6n+5)$
$3n^3-18n^2+15n$

10) $2k^3(2k^2+5k-4)$
$4k^5+10k^4-8k^3$

11) $8r^2(4r^2-5r+7)$
$32r^4-40r^3+56r^2$

12) $3(3v^2+8v-5)$
$9v^2+24v-15$

13) $7(6x^2+9xy+10y^2)$
$42x^2+63xy+70y^2$

14) $2u(6u^2-9uv+v^2)$
$12u^3-18u^2v+2uv^2$

15) $9(x^2+xy-8y^2)$
$9x^2+9xy-72y^2$

16) $9v^2(u^2+uv-5v^2)$
$9v^2u^2+9v^3u-45v^4$