

Summer Review Assignments for Pre-Algebra (7th Grade)

Dear Parents and Students:

Your teachers for next year are already making plans for our new school year, and we are all looking forward to seeing you in August.

These summer assignments are designed to be a review of the math skills expected of a seventh grader at Lanier Christian Academy entering the Pre-Algebra course. These math skills are very important to the success of your child this year. The summer review work will prepare students for the assessment, and allow teachers more instructional time and the ability to progress into new material sooner.

- **Print the assignment.**
- **Summer work is to be turned in on the first Monday of the first school week.**
- **Students must show their work and put a box around the answer.**
- **Parents, check the answers and mark incorrect answers with a colored pen, pencil, or marker. The answers are included.** Write the grade in the UPPER RIGHT corner (number correct divided by number of assigned problems times 100). **Also, please sign your name to indicate that the work was checked by you.** If your student misses 20% or more of the problems, your student needs to correct the missed problems to the right of the original work or on a separate piece of notebook paper. Staple all pages together. **Your student should make corrections until the grade is AT LEAST an 80.**

*****Points will be deducted if students do not show all their work & corrections, if parents do not grade and sign the work, and if the work turned in is below 80% correct.**

Thanks for working on this review and have a wonderful summer!

Greatest Common Factor

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

Least Common Multiple

Find the LCM of each.

1) 10, 3

2) 14, 6

3) 15, 6

4) 15, 20

5) 27, 18

6) 4, 30

7) 24, 32

8) 20, 30

9) 24, 36

10) 35, 25

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

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

Simplifying Variable Expressions

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

The Distributive Property

Simplify each expression.

1) $6(1 - 5m)$

2) $-2(1 - 5v)$

3) $3(4 + 3r)$

4) $3(6r + 8)$

5) $4(8n + 2)$

6) $-(-2 - n)$

7) $-6(7k + 11)$

8) $-3(7n + 1)$

9) $-6(1 + 11b)$

10) $-10(a - 5)$

11) $-3(1 + 2v)$

12) $-4(3x + 2)$

13) $(3 - 7k) \cdot -2$

14) $-20(8x + 20)$

15) $(7 + 19b) \cdot -15$

16) $(x + 1) \cdot 14$

Adding/Subtracting Integers

Find each sum.

1) $(-12) + 7$

2) $(-10) + (-7)$

3) $(-6) + 12$

4) $8 + 7$

5) $3 + 4$

6) $(-45) + 9$

7) $(-1) + (-46)$

8) $(-30) + 10$

9) $(-34) + 50$

10) $38 + (-5)$

Find each difference.

11) $2 - (-2)$

12) $(-1) - 10$

13) $8 - 7$

14) $(-8) - (-6)$

Order of Operations

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

Fractions, Decimals, and Percents

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

1) 90%

2) 30%

3) 115.9%

4) 9%

5) 7%

6) 65%

7) 0.3%

8) 445%

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

9) 0.452

10) 0.006

11) 0.002

12) 0.05

13) 4.78

14) 0.1

15) 3.63

16) 0.03

One-Step Equations With Integers

Solve each equation.

1) $v - 10 = -9$

2) $v - 10 = -3$

3) $x - 3 = 4$

4) $\frac{x}{5} = 2$

5) $22 = -11k$

6) $-13m = -377$

7) $b - 7 = -1$

8) $-8 = p - 13$

9) $-40 = -5p$

10) $418 = -22a$

11) $\frac{a}{29} = 5$

12) $-2 = \frac{m}{16}$

13) $x - 11 = 16$

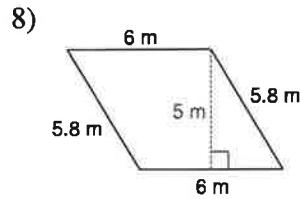
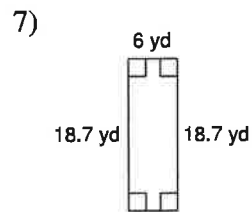
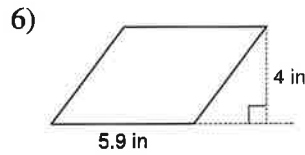
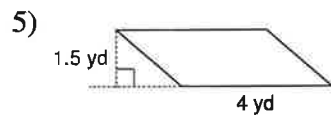
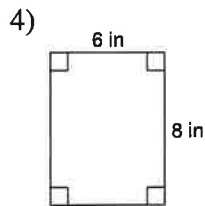
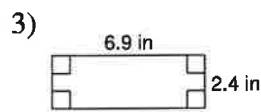
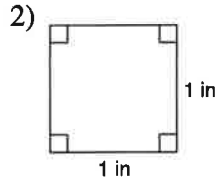
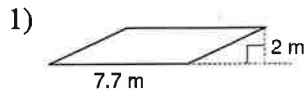
14) $-10 = x - 21$

One-Step Equation Word Problems

- 1) Lisa is cooking muffins. The recipe calls for 7 cups of sugar. She has already put in 2 cups. How many more cups does she need to put in?
- 2) At a restaurant, Mike and his three friends decided to divide the bill evenly. If each person paid \$13 then what was the total bill?
- 3) How many packages of diapers can you buy with \$40 if one package costs \$8?
- 4) Last Friday Trevon had \$29. Over the weekend he received some money for cleaning the attic. He now has \$41. How much money did he receive?
- 5) Last week Julia ran 30 miles more than Pranav. Julia ran 47 miles. How many miles did Pranav run?
- 6) How many boxes of envelopes can you buy with \$12 if one box costs \$3?
- 7) Amanda and her best friend found some money buried in a field. They split the money evenly, each getting \$24.28. How much money did they find?
- 8) Jenny wants to buy an MP3 player that costs \$30.98. How much change does she receive if she gives the cashier \$40?

Area of Squares, Rectangles, and Parallelograms

Find the area of each.



Greatest Common Factor

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

Least Common Multiple

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

 $90xy^3$

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

 $80x^4$

Simplifying Variable Expressions

Simplify each expression.

1) $-3p + 6p$

$3p$

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

$-b + 3$

3) $7x - x$

$6x$

4) $7p - 10p$

$-3p$

5) $-10v + 6v$

$-4v$

6) $-9r + 10r$

r

7) $9 + 5r - 9r$

$9 - 4r$

8) $1 - 3v + 10$

$11 - 3v$

9) $5n + 9n$

$14n$

10) $4b + 6 - 4$

$4b + 2$

11) $35n - 1 + 46$

$35n + 45$

12) $-33v - 49v$

$-82v$

13) $30n + 8n$

$38n$

14) $7x + 31x$

$38x$

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

$-28x - 11$

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

$-10 + 2n$

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

$45b - 56$

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

$2p - 1$

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

$-11 + 20n$

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

$-5k + 56$

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

$8 - 21b$

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

$-53 + 40n$

The Distributive Property

Simplify each expression.

1) $6(1 - 5m)$

$6 - 30m$

2) $-2(1 - 5v)$

$-2 + 10v$

3) $3(4 + 3r)$

$12 + 9r$

4) $3(6r + 8)$

$18r + 24$

5) $4(8n + 2)$

$32n + 8$

6) $-(-2 - n)$

$2 + n$

7) $-6(7k + 11)$

$-42k - 66$

8) $-3(7n + 1)$

$-21n - 3$

9) $-6(1 + 11b)$

$-6 - 66b$

10) $-10(a - 5)$

$-10a + 50$

11) $-3(1 + 2v)$

$-3 - 6v$

12) $-4(3x + 2)$

$-12x - 8$

13) $(3 - 7k) \cdot -2$

$-6 + 14k$

14) $-20(8x + 20)$

$-160x - 400$

15) $(7 + 19b) \cdot -15$

$-105 - 285b$

16) $(x + 1) \cdot 14$

$14x + 14$

Adding/Subtracting Integers

Find each sum.

1) $(-12) + 7$

 -5

2) $(-10) + (-7)$

 -17

3) $(-6) + 12$

 6

4) $8 + 7$

 15

5) $3 + 4$

 7

6) $(-45) + 9$

 -36

7) $(-1) + (-46)$

 -47

8) $(-30) + 10$

 -20

9) $(-34) + 50$

 16

10) $38 + (-5)$

 33 **Find each difference.**

11) $2 - (-2)$

 4

12) $(-1) - 10$

 -11

13) $8 - 7$

 1

14) $(-8) - (-6)$

 -2

Order of Operations

Evaluate each expression.

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

9

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

2

3) $1 + 7^2$

50

4) $5 \times 4 - 8$

12

5) $8 + 6 \times 9$

62

6) $3 + 17 \times 5$

88

7) $7 + 12 \times 11$

139

8) $15 + 40 \div 20$

17

9) $20 + 16 - 15$

21

10) $19 - 15 - 3$

1

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

9

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

3

Fractions, Decimals, and Percents

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%

One-Step Equations With Integers

Solve each equation.

1) $v - 10 = -9$

 $\{1\}$

2) $v - 10 = -3$

 $\{7\}$

3) $x - 3 = 4$

 $\{7\}$

4) $\frac{x}{5} = 2$

 $\{10\}$

5) $22 = -11k$

 $\{-2\}$

6) $-13m = -377$

 $\{29\}$

7) $b - 7 = -1$

 $\{6\}$

8) $-8 = p - 13$

 $\{5\}$

9) $-40 = -5p$

 $\{8\}$

10) $418 = -22a$

 $\{-19\}$

11) $\frac{a}{29} = 5$

 $\{145\}$

12) $-2 = \frac{m}{16}$

 $\{-32\}$

13) $x - 11 = 16$

 $\{27\}$

14) $-10 = x - 21$

 $\{11\}$

One-Step Equation Word Problems

1) Lisa is cooking muffins. The recipe calls for 7 cups of sugar. She has already put in 2 cups. How many more cups does she need to put in?

5

2) At a restaurant, Mike and his three friends decided to divide the bill evenly. If each person paid \$13 then what was the total bill?

\$52

3) How many packages of diapers can you buy with \$40 if one package costs \$8?

5

4) Last Friday Trevon had \$29. Over the weekend he received some money for cleaning the attic. He now has \$41. How much money did he receive?

\$12

5) Last week Julia ran 30 miles more than Pranav. Julia ran 47 miles. How many miles did Pranav run?

17

6) How many boxes of envelopes can you buy with \$12 if one box costs \$3?

4

7) Amanda and her best friend found some money buried in a field. They split the money evenly, each getting \$24.28. How much money did they find?

\$48.56

8) Jenny wants to buy an MP3 player that costs \$30.98. How much change does she receive if she gives the cashier \$40?

\$9.02

Area of Squares, Rectangles, and Parallelograms

Find the area of each.

