

Summer Algebra Packet for Rising 8th Graders

Name _____

Dear Students and Parents,

I am very excited about our upcoming year together! I have created this math packet for you to work over the summer. It contains problems that I think you will know based on the things that you have learned in during this school year. It is designed to review the math skills needed to be successful in Algebra.

The calculations in this packet **DO NOT require a calculator – so students are not permitted to use a calculator while working on this packet.** Please use the space provided to neatly show your work.

Please do your very best on this packet. It will count as your first test grade. It is due on the first full day of school, Monday, August 10th.

I can't wait to see you in the fall!

Student Signature _____

Parent Signature _____

MIDWAY COVENANT CHRISTIAN SCHOOL

2020 - 2021 School Year Calendar

July 30th - 31st	New Hire Orientation	
August 3rd - 5th	Pre-Planning for Teachers	
August 6th	Meet & Greet (9:00am - 11:00am)	
August 7th	1/2 day - 12:30 dismissal from the classroom	EARLY DISMISSAL
August 10th	First FULL Day of School	
September 7th	Labor Day/Student & Staff Holiday	NO SCHOOL
September 28th - October 2nd	Fall Break/Student & Staff Holiday	NO SCHOOL
October 19th - 21st	Fall Conferences - EARLY DISMISSAL at 12:30	
October 22nd - 23rd	Reformation Conference Break/Student & Staff Holiday	NO SCHOOL
November 23rd - 27th	Thanksgiving Break/Student & Staff Holiday	NO SCHOOL
December 18th	Christmas Chapel/ EARLY DISMISSAL at 11:00	
December 21st - January 1st	Christmas Break/Student & Staff Holiday	NO SCHOOL
January 4th	Student Holiday/Teacher Work Day	NO SCHOOL
January 18th	MLK Day - Student/Staff Holiday	NO SCHOOL
February 15th - 16th	Winter Break - Student/Staff Holiday	NO SCHOOL
March 24th	Spring Conference/ Early Dismissal 12:30 / Teacher Work Day	
April 2nd	Good Friday - Student/Staff Holiday	NO SCHOOL
April 5th - 9th	Spring Break - Student/Staff Holiday	NO SCHOOL
April 26th - 30th	IOWA Testing Week 2nd-8th/ EARLY DISMISSAL at 12:30	
May 7th	K4 - 8th Mother's Day Luncheon - EARLY DISMISSAL at 12:30	
May 13th	Last Day of School for K3	
May 20th	K4 & K5 - EARLY DISMISSAL at 11:00	
May 21st	K4 & K5 Awards Day/Last Day/ EARLY DISMISSAL (approx. 10:00)	
May 25th	8th Grade Graduation, 7:00pm	
May 27th	1st - 7th Grade Field Day - EARLY DISMISSAL at 11:30	
May 28th	1st - 7th Grade Awards Day/Last Day/ EARLY DISMISSAL (approx. 10:30)	
June 1st - 3rd	Post-Planning for Teachers	

Quarters (2nd-8th)
Terms (K3-1st)

Oct. 9 (40) Dec. 18 (43) March 12 (46) May 28 (49)
Sept. 18 (30) Nov. 6 (28) Dec. 18 (25), Feb. 19 (31) April 1 (29) May 28 (35)

Name _____

Please complete the packet and bring it with you to school on the first day of school.

Please show all work and no calculators allowed. ☺

Have a great summer.**Simplify.**

1. $3 - 15 \cdot 5$

7. $\frac{4 \cdot x^4}{4x^2}$

2. $17 - 6 \cdot 10 \div 2 + 12$

8. $\frac{120m^{16}}{45m^8}$

3. $5 \times (8 + 7) + 7$

4. $[2 \cdot (10 + 5)] - 5$

9. $\frac{8b^3}{20b^3}$

5. $(2^2)^3$

6. $\frac{x^5}{x^3}$

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ID: A

10. $\frac{3c^8}{12c^{12}}$

12. $(2n^4h^3)^4$

a. $2nh^{28}$

b. $2nh^{11}$

~~c. $16n^8h^7$~~

d. $16n^{16}h^{12}$

13. $\left(\frac{2}{9}\right)^3$

a. $\frac{8}{729}$

b. $\frac{6}{9}$

c. $\frac{2}{729}$

d. $\frac{8}{9}$

11. $(k^3d^5)^5$

Evaluate.

14. $6t - 6$, for $t = 6$

18. $3x^2 - 4$ for $x = 3$

15. $47 + 2d$, for $d = 3$

19. $8 - x^3$ for $x = 1$

16. $a \div 4$, for $a = 32$

20. $3(10m + 3z + 12)$ for $m = 3$ and $z = 6$

a. 120

b. 180

c. 185

d. 156

17. $6(b - a) + 2(4a - 3b)$

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21. To print tickets, a printer charges a \$70 setup fee plus \$1.25 per ticket. Write an algebraic expression for the cost of t tickets. What is the cost of 650 tickets?

- a. ~~$1.25t + 70$; \$882.50~~
b. $1.25t + 70$; \$812.50
c. $1.25t - 70$; \$742.50
d. $1.25t - 70$; \$882.50

Find the sum.

22. $-10 + 1 + (-6)$

23. $172 + (-167) + (-10) + (-144)$
a. -129
b. -149
c. 185
d. 139

24. The temperature in your town is 31°F . The radio announcer says that the temperature will drop 15 degrees. Write an expression to compute the predicted temperature. What will the temperature be?

- a. $31 + (-15)$; 16°F
b. $15 + (-31)$; -16°F
c. $15 + 31$; 46°F
d. $31 + 15$; 22°F

Simplify the product.

25. $4(-7)$

26. $-4 \cdot 10 \cdot 6$

Simplify the expression.

27. $3x + 3x$

29. $2c + 2 + 5c$

28. $7d + 12 - 4d - 3$

30. $9 - 5(-7x + 5)$

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31. $-7c^6 \cdot 3c^2$
a. $-21c^{12}$
b. $-4c^{12}$
c. $-4c^8$
~~d. $-21c^8$~~

32. $-7x^3 \cdot 8x^2$
a. $-56x^6$
b. $-15x^6$
~~c. $-56x^5$~~
d. $56x^5$

Use the Distributive Property to multiply.

33. $5(b + 8)$

35. $5(2t - 5)$

34. $9(4m + 1)$

36. $-3 \cdot m \cdot 4 \cdot n \cdot n$

a. $1mn^2$

b. $-12mn^2$

c. $-7mn^2$

d. $12mn^2$

Evaluate. Write in simplest form.

37. $\frac{x}{y}$ for $x = 8$ and $y = 6$

38. $\frac{y - x}{z}$ for $x = 4$, $y = 64$, and $z = 3$

Simplify.

39. $-15y + 11y - 9y$

40. $-2(4x) + 7x$

Show Work

Name _____

Date _____

Lesson _____

Solve each equation.

1. $-\frac{4}{5}c = \frac{7}{10}$

2. $b - 3\frac{1}{2} = 5$

3. $5d = \frac{3}{4}$

4. $\frac{d}{36} = \frac{2}{3}$

5. $\frac{t}{2} = \frac{1.5}{8}$

6. $75 = \frac{m}{3} + 10$

7. $\frac{3}{5}p + 18 = 24$

8. $3a + 2 = a - 8$

9. $\frac{8}{15} = \frac{y}{50}$

10. $10 - 5x = 15$

11. $6x - 2x = 12$

12. $8(f + 3) = 10f - 32$

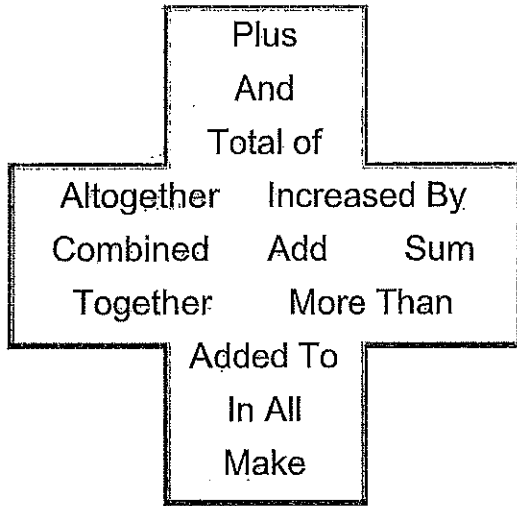
13. $3(b - 2) = 9b$

14. $2x + 6 = 5x$

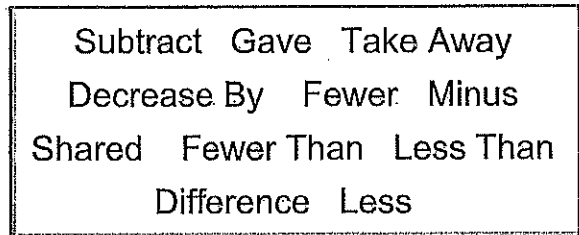
15. $0.05x - 0.08 + x = 0.97$

Words and Phrases to Math Symbols

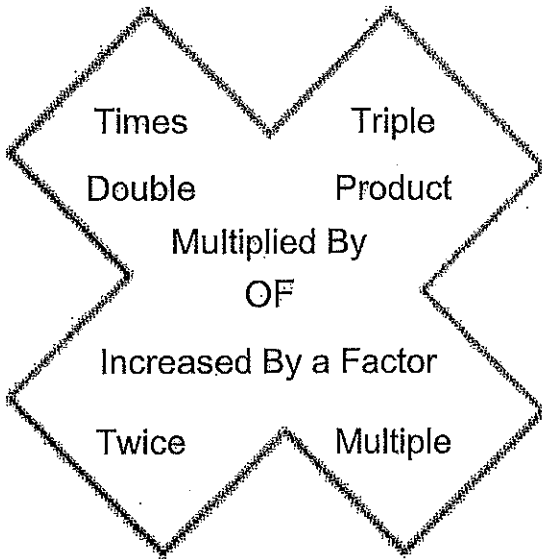
Addition



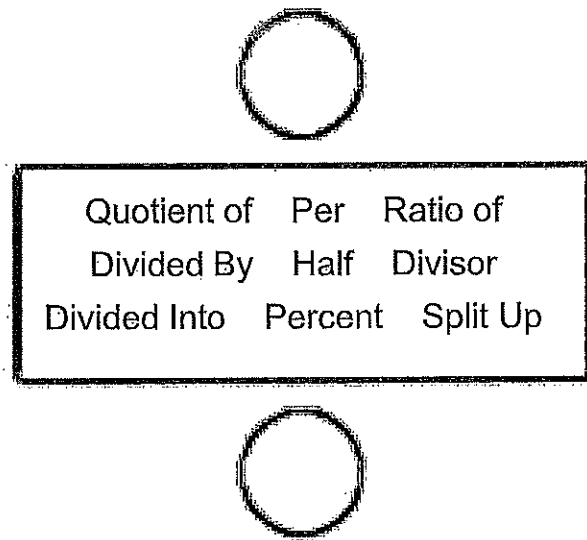
Subtraction



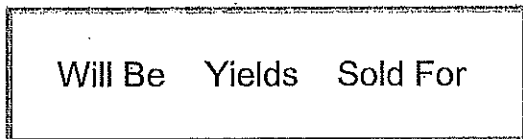
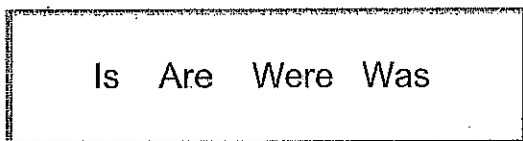
Multiplication



Division



Equals



Parenthesis Words

