

Summer Algebra Packet

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 5th.

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

Student Signature _____

Parent Signature _____

MIDWAY COVENANT CHRISTIAN SCHOOL

2019 - 2020 School Year Calendar

July 25th - 26th	New Hire Orientation	
July 29th - 31st	Pre-Planning for Teachers	
August 1st	Meet & Greet (9:00am - 11:00am)	
August 2nd	1/2 day - 12:30 dismissal from the classroom	
* August 5th *	* First FULL Day of School * Math Packet Due	
September 2nd	Labor Day/Student & Staff Holiday	NO SCHOOL
September 23rd - 27th	Fall Break/Student & Staff Holiday	NO SCHOOL
October 14th - 16th	Fall Conferences - EARLY DISMISSAL at 12:30	
October 17th - 18th	Reformation Conference Break/Student & Staff Holiday	NO SCHOOL
November 25th - 29th	Thanksgiving Break/Student & Staff Holiday	NO SCHOOL
December 20th	Christmas Chapel/ EARLY DISMISSAL at 11:00	
December 23rd - January 3rd	Christmas Break/Student & Staff Holiday	NO SCHOOL
January 3rd	Student Holiday/Teacher Work Day	NO SCHOOL
January 20th	MLK Day - Student/Staff Holiday	NO SCHOOL
February 17th - 18th	Winter Break - Student/Staff Holiday	NO SCHOOL
March 18th	Spring Conference/Early Dismissal 12:30/ Teacher Work Day	
April 6th - 10th	Spring Break - Student/Staff Holiday	NO SCHOOL
April 27th - May 1st	IOWA Testing Week/EARLY DISMISSAL at 12:30	
May 7th	Last Day of School for K3	
May 8th	K4 - 8th Mother's Day Luncheon - EARLY DISMISSAL at 12:30	
May 14th	K4 & K5 - EARLY DISMISSAL at 11:00	
May 15th	K4 & K5 Awards Day/Last Day/EARLY DISMISSAL (approx. 10:00)	
May 19th	8th Grade Graduation, 7:00pm	
May 21st	1st - 7th Grade Field Day - EARLY DISMISSAL at 11:30	
May 22nd	1st - 7th Grade Awards Day/Last Day/EARLY DISMISSAL (approx. 10:30)	
May 26th - 28th	Post-Planning for Teachers	

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

Oct. 5 (40) Dec. 21 (48) March 8 (42) May 24 (49)
Sept. 14 (30) Nov. 2 (28) Dec. 21 (30), Feb. 15 (29) March 29 (28) May 24 (34)

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

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

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

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

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

5. $(2^2)^3$

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

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

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

Name: _____

ID: A

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

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?

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

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

Name: _____

ID: A

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. $12mn^2$ 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. $\frac{t}{2} = \frac{15}{8}$

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. $0.05x - 0.08 + x = 0.97$

