

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 things that you have learned in 7th grade. 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 6th.**

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

Student Signature: _____

Parent Signature: _____

MIDWAY COVENANT CHRISTIAN SCHOOL

Math Packet
Approved 11/6/2017
Due

2018 - 2019 School Year Calendar

JULY 2018

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

July 26, 27 New Hire Orientation

July 30, 31 Teacher Work Days

AUGUST 2018

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Aug. 2 - Meet & Greet

Aug. 3 - Early Dismissal

SEPTEMBER 2018

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						1

Sept. 3 Labor Day Holiday

Sept. 24 - 26 Fall Break

OCTOBER 2018

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Oct. 15 - 17 Parent Conferences (1/2 day)

Oct. 18 - 19 Reformation Conference Break

NOVEMBER 2018

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Nov. 19 - 23 Thanksgiving Break

DECEMBER 2018

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					1

Dec. 21 - Early Dismissal 11:00

Dec. 24 - Jan. 4 Christmas Break

JANUARY 2019

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Jan. 4 - Teacher Work Day

Jan. 21 - MLK Holiday

FEBRUARY 2019

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

February 18 - 19 Winter Break

MARCH 2019

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Mar 20 Spring Conferences

APRIL 2019

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

April 1 - 5 Spring Break

April 19 - Good Friday Break

MAY 2019

Su	M	Tu	W	Th	F	Sa
						4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Apr 29 - May 3 IOWA Testing Week (Early Dismissal at 12:30)

May 9 - Last day for K3

May 16-17 Early Dismissal for K4 & K5

JUNE 2019

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

May 10 - Mother's Lunch / Early Dismissal all grades(12:30)

May 21 - 8th Grade Graduation

May 23, 24 Early Dismissal for 1st - 7th

1st Semester - 88 days

2nd Semester - 91 days

179 Days Total

CALENDAR LEGEND

First and Last Days of School

Meet and Greet - 9:00am - 11:00am

Holiday - School Closed

Student Holiday/Teacher Work Day

Early Dismissal

IOWA Testing Week/Early Dismissal

8th Grade Graduation

Term K3 - 1st

New Hire Orientation

40, 48, 42, 49

Terms

Quarter 2nd - 8th

30,28,30,29,28,34

30,28,30,29,28,34

30,28,30,29,28,34

30,28,30,29,28,34

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

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

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

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

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

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

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

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

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

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. $\frac{t}{2} = \frac{15}{8}$

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. $0.05x - 0.08 + x = 0.97$