

Mason County Schools
Point Pleasant High School
Snow Day Packet
Trig/PreCalc
Days 1-5

Instructions: Read Carefully

1. This document contains all 5 of your Snow Day Packet assignments. Do only 1 assignment per day. You may use all or none of these assignments according to number of days missed.
2. Follow all instructions and **make an attempt to solve every problem**. You will turn these in when you return or digitally.
3. If you have technological issues or family emergencies, you have five days to turn your work in to your teacher.

TRIG/PRECAL RE-IMAGINED DAY 1

Making Practice Fun 95

Name _____

Quadratic Equations—Solving by Completing the Square

FACTS ABOUT CAPITALS

1. Work each exercise.
2. Find the code letter for the correct answer.
3. Write the code letter in each blank having that exercise number.

Exercises

Solve.

- | | | | |
|------------------------|-------|---|---------------------------|
| 1. $x^2 - 4x - 12 = 0$ | 6, -2 | L | 14. $x^2 - 2x - 2 = 0$ |
| 2. $x^2 - 4x - 21 = 0$ | | | 15. $x^2 - 6x - 8 = 0$ |
| 3. $x^2 + 4x - 32 = 0$ | | | 16. $x^2 - 10x - 2 = 0$ |
| 4. $x^2 + 4x - 12 = 0$ | | | 17. $x^2 + 2x - 10 = 0$ |
| 5. $x^2 + 2x - 5 = 0$ | | | 18. $x^2 + 6x - 16 = 0$ |
| 6. $x^2 - 2x - 1 = 0$ | | | 19. $x^2 + 6x - 12 = 0$ |
| 7. $x^2 + 5x - 14 = 0$ | | | 20. $2x^2 + 9x + 10 = 0$ |
| 8. $x^2 + 7x - 8 = 0$ | | | 21. $3x^2 + 2x - 1 = 0$ |
| 9. $x^2 - 2x - 4 = 0$ | | | 22. $2x^2 + 16x + 32 = 0$ |
| 10. $x^2 + 8x - 2 = 0$ | | | 23. $x^2 + 4x - 14 = 0$ |
| 11. $x^2 - 2x - 6 = 0$ | | | 24. $x^2 - 4x - 14 = 0$ |
| 12. $x^2 - 4x - 8 = 0$ | | | 25. $x^2 + 6x - 2 = 0$ |
| 13. $x^2 - 6x - 2 = 0$ | | | 26. $x^2 + 12x + 20 = 0$ |

What is the capital of ...

India? $\overline{9}$ $\overline{20}$ $\overline{7}$ $\overline{18}$ $\overline{20}$ $\overline{1}$ $\overline{3}$ $\overline{15}$

Peru? $\overline{1}$ $\overline{15}$ $\overline{22}$ $\overline{11}$

Jamaica? $\overline{19}$ $\overline{15}$ $\overline{9}$ $\overline{8}$ $\overline{24}$ $\overline{2}$ $\overline{17}$ $\overline{9}$

Phillipines? $\overline{10}$ $\overline{26}$ $\overline{20}$ $\overline{23}$ $\overline{17}$ $\overline{9}$ $\overline{6}$ $\overline{15}$ $\overline{2}$ $\overline{25}$

Indonesia? $\overline{13}$ $\overline{11}$ $\overline{19}$ $\overline{11}$ $\overline{4}$ $\overline{2}$ $\overline{11}$

Barbados? $\overline{14}$ $\overline{4}$ $\overline{15}$ $\overline{18}$ $\overline{8}$ $\overline{20}$ $\overline{2}$ $\overline{17}$ $\overline{7}$ $\overline{9}$

Fiji? $\overline{24}$ $\overline{26}$ $\overline{12}$ $\overline{11}$

Mexico? $\overline{22}$ $\overline{20}$ $\overline{21}$ $\overline{15}$ $\overline{6}$ $\overline{17}$ $\overline{6}$ $\overline{15}$ $\overline{2}$ $\overline{25}$

Bulgaria? $\overline{24}$ $\overline{17}$ $\overline{16}$ $\overline{15}$ $\overline{11}$

Egypt? $\overline{6}$ $\overline{11}$ $\overline{15}$ $\overline{4}$ $\overline{17}$

Czechoslovakia? $\overline{5}$ $\overline{4}$ $\overline{11}$ $\overline{8}$ $\overline{26}$ $\overline{20}$

Code Letter	Answers
A	$1 \pm \sqrt{7}$
B	$1 \pm \sqrt{3}$
C	$1 \pm \sqrt{2}$
D	-8, 2
E	$-\frac{5}{2}, -2$
F	$5 \pm 3\sqrt{3}$
G	-8, 1
H	4, -8
I	$3 \pm \sqrt{17}$
J	$3 \pm \sqrt{11}$
K	$-3 \pm \sqrt{21}$
L	6, -2
M	-4, -4
N	$1 \pm \sqrt{5}$
O	$-1 \pm \sqrt{11}$
P	$-1 \pm \sqrt{6}$
Q	$-4 \pm 3\sqrt{2}$
R	-6, 2
S	$2 \pm 3\sqrt{2}$
T	7, -3
U	-10, -2
V	$2 \pm 2\sqrt{3}$
W	-7, 2
X	$\frac{1}{2}, -1$
Y	$-3 \pm \sqrt{11}$
Z	$-2 \pm 3\sqrt{2}$

TRIG/PRECAL RE-IMAGINED DAY 2

Making Practice Fun 96

Name _____

Quadratic Equations—Solving Using the Quadratic Formula

INFORMATION TIME

1. Work each exercise.
2. Shade in the block that contains the answer.
3. Find the answer to the question in the unshaded blocks.

Exercises

Solve.

1. $x^2 - 2x - 5 = 0$ $1 \pm \sqrt{6}$

2. $x^2 - 3x - 3 = 0$

3. $x^2 - 4x = 6$

4. $x^2 + 5x = 3$

5. $x^2 + x = 1$

6. $x^2 + 2x = 1$

7. $x^2 + 3x = 5$

8. $2x^2 + 3x = 5$

9. $3x^2 + 2x = 7$

10. $5x^2 + x = 1$

11. $3x^2 + 7x + 2 = 1$

12. $6x^2 + 7x + 1 = 0$

13. $2x^2 + 8x + 3 = 0$

14. $5x^2 - 2x - 2 = 0$

15. $x^2 - x - 10 = 0$

16. $6x^2 = 0$

17. $3x^2 = 4$

18. $x^2 - 3x + 1 = 5$

19. $-2x^2 + 3x + 6 = 0$

20. $-x^2 - x + 3 = 0$

21. $x^2 - 4x - 13 = 0$

22. $5x^2 + 7x + 2 = 0$

23. $5x^2 - 3x = 2$

24. $x^2 - x - 4 = 0$

25. $3x^2 - 12x + 3 = 0$

26. $9x^2 + 6x - 10 = 0$

27. $3x^2 + 5x - 20 = 10 - x$

28. $x^2 - 3x - 9 = 18 - 3x$

29. $x^2 + 4x - 2 = 3 - 3x$

30. $x^2 + 5x + 2 = 3x + 9$

What is the math term for 10^{100} ?

G $\pm \frac{2\sqrt{3}}{3}$	O $\frac{-7 \pm \sqrt{37}}{6}$	L $-1 \pm 2\sqrt{2}$	G $\frac{3 \pm \sqrt{57}}{4}$	A $2 \pm \sqrt{3}$	L $\frac{3 \pm \sqrt{57}}{2}$
B $\frac{-3 \pm \sqrt{29}}{2}$	A $-1, -\frac{1}{6}$	L $\frac{1 \pm \sqrt{17}}{2}$	G $\frac{-1 \pm \sqrt{11}}{3}$	O $\frac{-1 \pm \sqrt{41}}{2}$	A $-1, -\frac{2}{3}$
G $\frac{3 \pm \sqrt{21}}{2}$	L 4, -1	G $\frac{-1 \pm \sqrt{22}}{3}$	G $\frac{-3 \pm \sqrt{21}}{2}$	A $\frac{1 \pm \sqrt{11}}{5}$	G $\frac{-4 \pm \sqrt{10}}{2}$
A $\pm 3\sqrt{5}$	B $\frac{-5 \pm \sqrt{37}}{2}$	O $-1, \frac{5}{2}$	O $1 \pm \sqrt{6}$	H $\frac{-1 \pm \sqrt{21}}{10}$	A $\frac{-7 \pm \sqrt{69}}{2}$
B $1, -\frac{2}{3}$	O $\pm \frac{\sqrt{3}}{3}$	O $2 \pm \sqrt{10}$	H $1, -\frac{5}{2}$	O 0, 0	L $2 \pm \sqrt{17}$
G $\frac{1 \pm \sqrt{11}}{3}$	G $\frac{1 \pm \sqrt{41}}{2}$	A $-1 \pm \sqrt{2}$	G $\frac{-1 \pm \sqrt{13}}{2}$	A $\frac{-1 \pm \sqrt{5}}{2}$	G $-1 \pm \sqrt{11}$

TRIG/PRECAL RE-IMAGINED DAY 3

Making Practice Fun 98

Name _____

Quadratic Equations—Solving Geometry Problems

DIAGRAM PUZZLE

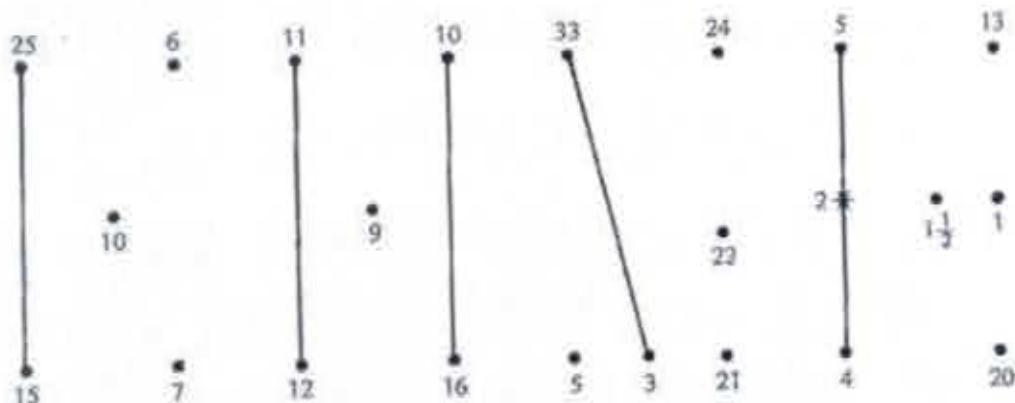
1. Work Exercise A1 and Exercise B1.
2. Draw a straight line segment connecting those two answers.
3. Continue with Exercise A2 and Exercise B2, and so on.

Exercises A

1. A picture frame is 22 cm by 15 cm. If 198 cm^2 of picture shows, find the width of the frame. 2 cm
2. The length of a rectangle is 1 m greater than the width. The area of the rectangle is 110 m^2 . Find the length of the rectangle.
3. Find the width of the rectangle in Exercise 3B.
4. The length of a rectangle is 5 times the width. The area is 80 m^2 . Find its width.
5. The length of a rectangle is 8 times the width. The area is 72 cm^2 . Find the length.
6. The perimeter of a rectangle is 30 cm. The area is 36 cm^2 . Find the length of the rectangle.
7. The perimeter of a rectangle is 36 m. The area is 65 m^2 . Find the length of the rectangle.

Exercises B

1. A picture frame is 18 cm by 14 cm. If 165 cm^2 of picture shows, find the width of the frame.
2. Find the width of the rectangle in Exercise 2A.
3. The length of a rectangle is 8 m greater than the width. The area is 105 m^2 . Find the length of the rectangle.
4. Find the length of the rectangle in Exercise 4A.
5. Find the width of the rectangle in Exercise 5A.
6. The perimeter of a rectangle is 40 cm. The area is 64 cm^2 . Find the length of the rectangle.
7. Find the width of the rectangle in Exercise 7A.



TRIG/PRECAL RE-IMAGINED DAY 4

Making Practice Fun 106

Name _____

Sets, Functions, and Relations—Finding Values of Functions

DOT-TO-DOT PUZZLE

1. Work each exercise.
2. Find the dot by each answer and connect the dots in order.

Exercises

Use the functions below to work each exercise.

$$f(x) = x + 6$$

$$g(x) = x^2 - 1$$

$$h(x) = 3x + 4$$

$$k(x) = 2x^2 - 4x + 1$$

$$p(x) = -x$$

- | | | |
|----------------|--------------|-----------------------|
| 1. $f(4) = 10$ | 11. $f(-11)$ | 21. $f(0)$ |
| 2. $g(3)$ | 12. $g(1)$ | 22. $g(2)$ |
| 3. $h(-1)$ | 13. $h(-4)$ | 23. $h(0)$ |
| 4. $k(1)$ | 14. $k(10)$ | 24. $k(3)$ |
| 5. $p(6)$ | 15. $p(11)$ | 25. $p(-\frac{1}{2})$ |
| 6. $f(-9)$ | 16. $f(-8)$ | 26. $f(0.4)$ |
| 7. $g(-4)$ | 17. $g(-10)$ | 27. $g(\frac{1}{2})$ |
| 8. $h(5)$ | 18. $h(3)$ | 28. $h(-1.2)$ |
| 9. $k(-3)$ | 19. $k(6)$ | 29. $k(\frac{1}{2})$ |
| 10. $p(-9)$ | 20. $p(99)$ | 30. $p(\sqrt{6})$ |



TRIG/PRECAL RE-IMAGINED DAY 5

Making Practice Fun 110

Name _____

Right Triangle Trigonometry—Finding the Sine

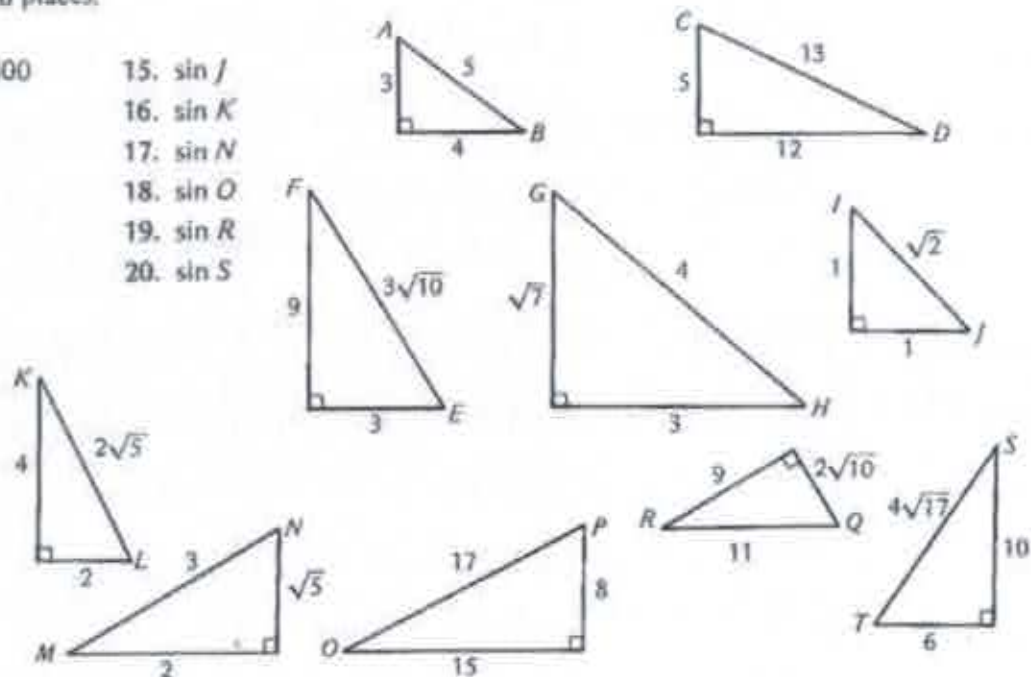
HIDDEN MESSAGE

1. Work each exercise.
2. Shade in the block that contains the answer.
3. Read the message in the unshaded blocks.

Exercises.

Use the triangles at the right. Find the sine in reduced radical form or rounded to three decimal places.

1. $\sin A = 0.800$
2. $\sin C$
3. $\sin E$
4. $\sin H$
5. $\sin I$
6. $\sin L$
7. $\sin M$
8. $\sin P$
9. $\sin Q$
10. $\sin T$
11. $\sin B$
12. $\sin D$
13. $\sin F$
14. $\sin G$



O 0.474	N $\frac{5\sqrt{17}}{34}$	E $\frac{3\sqrt{10}}{10}$	A 0.471	S $\frac{2\sqrt{5}}{5}$	K $\sqrt{10}$
A $\frac{\sqrt{5}}{3}$	N $\frac{\sqrt{2}}{2}$	S 0.800	W 0.667	E $\frac{\sqrt{7}}{4}$	R 0.923
F $\frac{\sqrt{10}}{10}$	I 0.818	N 0.882	D 0.75	M $\frac{3\sqrt{17}}{34}$	E $\frac{2\sqrt{10}}{11}$
A $\frac{3\sqrt{17}}{14}$	N $\frac{\sqrt{5}}{5}$	D 0.600	T $\frac{\sqrt{2}}{2}$	R 0.385	Y 0.925