

Algebra/Trigonometry Coding Project

You will use the coding techniques learned in Chapter 10 to encode a message to be sent to another group and also to decode a message sent to you. You will have four days to work on this project in class. The entire project is due by the end of your class period on Friday May 18th; therefore you must have your encoded message to me by early Wednesday May 16th so I can check it and distribute it to a different group for them to decode it by Friday. This project will count as a 65pt. test grade.

For this project you will use the following cipher:

0=Space	9=I	18=R
1=A	10=J	19=S
2=B	11=K	20=T
3=C	12=L	21=U
4=D	13=M	22=V
5=E	14=N	23=W
6=F	15=O	24=X
7=G	16=P	25=Y
8=H	17=Q	26=Z

To Encode your Message:

- Write a message that uses *at least* 30 characters/spaces.
- Choose a 2x2 matrix to encode your message.
- Encode your message and fill in the Coded message form provided.
- Write the encoded message & last 4 characters/spaces on the Decoding form provided.
- Be sure to write your group name in the space provided at the top of the form.
- Turn your Coded message form and grade sheet in to Ms. Drake by **Wednesday May 16th** .

To Decipher a Message:

- Use the given last 4 characters to find the matrix used to encode the message
- Use the matrix to decipher the rest of the message
- Write the solution matrix and deciphered message on the form the code was on.
- Be sure to write your group name in the space provided at the top of the form.
- Attach all your scratch work used to decode the message.
- Turn in to Ms. Drake by **Friday May 18th** .

Group Name _____

Coded Message

Message: _____

Write in cipher:

Encoding Matrix:

[]

Coded Message:

We are _____ and
(Group that **Solved** the message)

we solved _____ Message!!!
(Group that **Encoded** the message)

Decoding Sheet

Coded Message:

Last 4 characters/spaces

Solution Matrix:

[]

Deciphered Code:

Message: _____
_____.

Group Name _____

Names _____

Coding Project Grade Sheet

Coded Message

Correctly written in cipher _____/5 pts.

Used invertible matrix _____/5 pts.

Correctly used matrix to code message _____/15 pts.

Turned in by Wednesday May 16th _____/5 pts.

_____/30 pts.

Decipher Message

Found correct solution matrix _____/10 pts.

Attached all necessary work _____/5 pts.

Correctly deciphered code _____/15 pts.

Correctly deciphered message _____/5 pts.

_____/35 pts.

Total _____/65 pts.