

Appendix C

**FENNAMMA-SHERMAN ATTITUDE
MATHEMATICS SCALE**

FENNEMA-SHERMAN ATTITUDE MATHEMATICS SCALE

Student Directions

By answering these questions, I will find out how you feel about yourself and math. Each of the pages has statements and boxes with letters A, B, C, D, & E. You can mark your answers right on the sheet.

Example 1: I like math.

As you read each statement, you will know if you agree or disagree. Use the code and mark the box that best fits your opinion.

A= I STRONGLY AGREE

B= I AGREE, BUT NOT AS STRONG OR "SORT OF" AGREE

C= I'M NOT SURE

D= I DISAGREE, "SORT OF"

E= I STRONGLY DISAGREE

TIPS:

- Mark every statement
- Work fast, but carefully
- There are no "right" or "wrong" answers
- Whenever possible, let things that have happened to you help you make your decision.

ATTITUDE TOWARDS SUCCESS IN MATHEMATICS						
1	I like math	A	B	C	D	E
2	I'd be proud to be the outstanding math student.	A	B	C	D	E
3	I am happy to get good grades in math	A	B	C	D	E
4	It would be great to win a prize in math	A	B	C	D	E
5	Being first in a math competition would make me happy	A	B	C	D	E
6	Being thought of as smart in math would be a great thing	A	B	C	D	E
7	Winning a prize in math would make me feel embarrassed	A	B	C	D	E
8	Other kids will think I'm weird if I get good grades in math	A	B	C	D	E
9	If I get good grades in math, I would try to hide it	A	B	C	D	E
10	If I got the highest grade in math, I'd prefer no one knew.	A	B	C	D	E
11	It would make kids like me less if I were a really good math student	A	B	C	D	E
12	I don't like people to think I'm smart in math	A	B	C	D	E

MATH ANXIETY						
13	Math does not scare me at all	A	B	C	D	E
14	It wouldn't bother me at all to take more math courses.	A	B	C	D	E
15	I don't usually worry about being able to solve math problems	A	B	C	D	E
16	I almost never get nervous during a math test	A	B	C	D	E
17	I am usually calm during math tests	A	B	C	D	E
18	I am usually calm in math class	A	B	C	D	E
19	Math usually makes me feel uncomfortable and nervous	A	B	C	D	E
20	Math makes me feel uncomfortable, restless, irritable, and impatient	A	B	C	D	E
21	I get a sick feeling when I think of trying to do math problems	A	B	C	D	E
22	My mind goes blank and I am unable to think clearly when working math problems	A	B	C	D	E
23	A math test would scare me	A	B	C	D	E
24	Math makes me feel uneasy, confused, and nervous	A	B	C	D	E

MOTIVATION						
25	I like math puzzles	A	B	C	D	E
26	Math is enjoyable to me	A	B	C	D	E
27	When a math problem comes up that I cannot solve right away, I stick with it until I find the solution	A	B	C	D	E
28	Once I start working on a math puzzle, it is hard to stop	A	B	C	D	E
29	When I have a question that doesn't get answered in math class, I keep thinking about it	A	B	C	D	E
30	I am challenged by math problems I cannot understand right away	A	B	C	D	E
31	Figuring out math problems is not something I like to do.	A	B	C	D	E
32	The challenge of math problems does not appeal to me.	A	B	C	D	E
33	Math puzzles are boring	A	B	C	D	E
34	I do not understand how some people can spend so much time on math and seem to like it	A	B	C	D	E
35	I would rather have someone else figure out a tough math problem than have to work it out myself	A	B	C	D	E
36	I do as little work in math as possible	A	B	C	D	E

USEFULNESS OF MATH						
37	I'll need math for my career	A	B	C	D	E
38	I study math because I know how useful it is	A	B	C	D	E
39	Knowing math will help me learn a living	A	B	C	D	E
40	Math is an important and useful subject	A	B	C	D	E
41	I need to master math for my future work	A	B	C	D	E
42	I will use math in many ways as an adult	A	B	C	D	E
43	Math is not important in my life	A	B	C	D	E
44	Math will not be important in my life's work	A	B	C	D	E
45	I see math as a subject that I won't use very much in daily life as an adult	A	B	C	D	E
46	Taking math is a waste of time	A	B	C	D	E
47	It's not important for me to do well in math as an adult	A	B	C	D	E
48	I expect to have little use for math when I get out of school	A	B	C	D	E

TEACHER'S MATH ATTITUDE						
49	My teachers have encouraged me to study more math	A	B	C	D	E
50	My teachers think I am the kind of person who could do well in math	A	B	C	D	E
51	Math teachers have made me feel that I have the ability to do a lot of math	A	B	C	D	E
52	My math teachers would encourage me to do all of the math I can	A	B	C	D	E
53	My math teachers have been interested in my progress in math	A	B	C	D	E
54	I would like to talk to my math teacher about careers that use math	A	B	C	D	E
55	When it comes to anything serious, I have felt ignored when I try to talk to the math teacher	A	B	C	D	E
56	I have found it hard to win the respect of math teachers	A	B	C	D	E
57	My teachers think advanced math is a waste of time for me	A	B	C	D	E
58	Getting a math teacher to take me seriously is usually a problem	A	B	C	D	E
59	My teachers would think I was kidding if I told them I was interested in a career in math	A	B	C	D	E
60	I have had a hard time getting teachers to talk seriously about math	A	B	C	D	E

CONFIDENCE IN LEARNING MATH						
61	I feel confident trying math	A	B	C	D	E
62	I am sure that I could do advanced work in math	A	B	C	D	E
63	I am sure that I can learn math	A	B	C	D	E
64	I think I could handle more difficult math	A	B	C	D	E
65	I can get good grades in math	A	B	C	D	E
66	I have a lot of self-confidence when it comes to math	A	B	C	D	E
67	I am no good at math	A	B	C	D	E
68	I do not think I could do advanced math	A	B	C	D	E
69	I am not the type to do well in math	A	B	C	D	E
70	For some reason, even though I study, math is really hard for me	A	B	C	D	E
71	I do fine in most subjects, but when it comes to math I really mess up	A	B	C	D	E
72	Math is my worst subject	A	B	C	D	E

Key to Fennema-Sherman Math Attitudes Scales

Item No.	Category	Attitude	Item No.	Category	Attitude	Item No.	Category	Attitude
1	AS	+	25	M	+	49	T	+
2	AS	+	26	M	+	50	T	+
3	AS	+	27	M	+	51	T	+
4	AS	+	28	M	+	52	T	+
5	AS	+	29	M	+	53	T	+
6	AS	+	30	M	+	54	T	+
7	AS	-	31	M	-	55	T	-
8	AS	-	32	M	-	56	T	-
9	AS	-	33	M	-	57	T	-
10	AS	-	34	M	-	58	T	-
11	AS	-	35	M	-	59	T	-
12	AS	-	36	M	-	60	T	-
13	A	+	37	U	+	61	C	+
14	A	+	38	U	+	62	C	+
15	A	+	39	U	+	63	C	+
16	A	+	40	U	+	64	C	+
17	A	+	41	U	+	65	C	+
18	A	+	42	U	+	66	C	+
19	A	-	43	U	-	67	C	-
20	A	-	44	U	-	68	C	-
21	A	-	45	U	-	69	C	-
22	A	-	46	U	-	70	C	-
23	A	-	47	U	-	71	C	-
24	A	-	48	U	-	72	C	-

Abbreviations Used

AS = Attitude toward success in math

A = Anxiety toward math

M = Motivation toward math

U = Usefulness of math

TA = Teacher's math attitude

C = Confidence in math

(+) = Question reflects positive attitude

(-) = Question reflects negative attitude

Scoring Directions

Each positive item receives a score based on points.

A = 5, B = 4, C = 3, D = 2, E = 1

The scoring for each negative item should be reversed.

A = 1, B = 2, C = 3, D = 4, F = 5

Add the scores for each group to get a total for that attitude

