Mathematics Self-Efficacy Scale-Revised (MSES-R)

Pajares, F., & Kranzler, J. (1994). Self-efficacy, self-concept, and general mental ability in mathematical problem-solving. *Florida Educational Research Council Research Bulletin, 26*, 8-32.

18 Items

1 Dimensions

1. In a certain triangle, the shortest side is 6 inches. The longest side is twice as long as the shortest side, and the third side is 3.4 inches shorter than the longest side. What is the sum of the three sides in inches?

2. About how many times larger than 614,360 is 30,668,000?

3. There are three numbers. The second is twice the first and the first is one-third of the other number. Their sum is 48. Find the largest number.

4. Five points are on a line. T is next to G. K is next to H. C is next to T. H is next to G. Determine the positions of the points along the line.

5. If y = 9 + x/5, find x when y = 10.

6. A baseball player got two hits for three times at bat. This could be represented by 2/3. Which decimal would most closely represent this?

7. If P = M + N, then which of the following will be true? a. N = P - M b. P - N = M c. N + M = P

8. The hands of a clock form an obtuse angle at _____ o'clock.

9. Bridget buys a packet containing 9-cent and 13-cent stamps for \$2.65. If there are 25 stamps in the packet, how many are 13-cent stamps?

10. On a certain map, 7/8 inch represents 200 miles. How far apart are two towns whose distance apart on the map is 3 1/2 inches?

11. Fred's bill for some household supplies was \$13.64. If he paid for the items with a \$20 bill, how much change should he receive?

12. Some people suggest that the following formula be used to determine the average weight for boys between the ages of 1 and 7: W = 17 + 5A where W is the weight in pounds and A is the boy's age in years. According to this formula, for each year older a boy gets, should his weight become more or less, and by how much?

13. Five spelling tests are to be given to Mary's class. Each test has a value of 25 points. Mary's average for the first four tests is 15. What is the highest possible average she can have on all five tests? 14. 34/5 - 1/2 =_____

15. In an auditorium, the chairs are usually arranged so that there are rows and y seats in a row. For a popular speaker, an extra row is added, and an extra seat is added to every row. Thus, there are x + 1 rows and y + 1 seats in each row, and there will be (x + 1) and (y + 1) seats in the auditorium. Multiply (x + 1) (y + 1).

16. A ferris wheel measures 80 feet in circumference. The distance on the circle between two of the seats is 10 feet. Find the measure in degrees of the central angle SOT whose rays support the two seats.

17. Set up the problem to be done to find the number asked for in the expression "six less than twice 4 5/6"?

18. The two triangles shown on the right are similar. Thus, the corresponding sides are proportional, and AC / BD = XZ / YZ If AC = 1.7, BC = 2, and XZ = 5.1, find YZ.

5-point Likert Scale (1 = Not at all Confident - 5= Completely Confident)

Cronbachs α : .95