

Appendix 3 Tools for the Present Study

- (1) Post Test
- (2) Achievement Test
- (3) Reaction Scale

Appendix 3 Tools for the Present Study

TEST

Name of the school:

Name of the student and Roll no.:

Class and section:

Date:

Maximum time: 60 min

1. By selling an umbrella for Rs. 30, a shopkeeper gains 20%. During a clearance sale, the shopkeeper allows a discount of 10% of the marked price, his gain percent during the sale season is
(a) 7 (b) 7.5 (c) 8 (d) 9

2. A shopkeeper allows a discount of 10% on the marked price of an item but charges a sales tax of 8% on the discounted price. If the customer pays Rs. 680.40 as the price including the sales tax, what is the marked price of the item?
(a) Rs. 630 (b) Rs. 700 (c) Rs. 780 (d) None

3. The difference between the cost price and sale price of an article is Rs. 240. If the profit percent is 20, at what price was the article sold?
(a) Rs. 1240 (b) Rs. 1400 (c) Rs. 1600 (d) None of these.

4. By selling a motor cycle for Rs. 22600, A person gains 13%, what was his gain?
(a) Rs. 600 (b) Rs. 2936 (c) Rs. 2600 (d) Data inadequate

5. A shopkeeper bought locks at the rate of 8 locks for Rs. 34 and sold them at 12 locks for Rs. 57. The number of locks he should sell to have a profit of Rs.900, is ?
(a) 1400 (b) 1600 (c) 2000 (d) 1800

6. A shopkeeper earns 15% profit on a shirt even after allowing 31% discount on the list price. If the list price is Rs. 125, then the cost price of the shirt is?
(a) Rs. 75 (b) Rs. 87 (c) Rs. 80 (d) Rs. 69

7. The amount charged for the use of borrowed money is called:
(a) Principle (b) Term (c) Interest (d) Rate

8. The amount of an original investment is called:
(a) Principle (b) Term (c) Interest (d) Rate

9. What will Rs.1500 amount to in three years if it is invested in 20% p.a. compound interest, interest being compounded annually?
(a) 2400 (b) 2592 (c) 2678 (d) 2540

10. At the rate of 6% p.a. simple interest, a sum of Rs. 2500 will earn how much interest by the end of 5 years ?
(a) 500 (b) Rs. 700 (c) Rs. 750 (d) Rs. 3250

11. How long will it take for a sum of money to grow from Rs.1250 to Rs.10,000, if it is invested at 12.5% p.a simple interest?
 (a) 8 years (b) 64 years (c) 72 years (d) 56 years
12. Find the simple interest and amount on Rs.3000 for 4 months at the rate of 12%.
 (a) Rs.120, Rs.3120 (b) Rs.150, Rs.3150 (c) Rs.200, Rs.3000 (d) none of the above
- 13: Mohan borrowed Rs.6000 at 12% rate of simple interest from a financier on 10-3-04. What total sum should he pay on 22-5-04 to clear the debt?
 (a) Rs.6144 (b) Rs.6530 (c) Rs.6320 (d) none of the above
- 14: Find the Compound Interest and amount on Rs.5000 for 2 years at the rate of 8%.
 (a) Rs.440, Rs.5440 (b) Rs.832, Rs.5832 (c) Rs.100, Rs.5100 (d) none of the above
- 15: Find the difference between compound interest and simple interest on Rs 12,000 at 10% for 2 years.
 (a) Rs. 120 (b) Rs.530 (c) Rs. 634 (d) Rs. 325
- 16: The compound interest for the second year on Rs.1600 at the rate of 5% is Rs._____
 (a) Rs.50 (b) Rs. 60 (c) Rs. 84 (d) Rs. 35
- 17: Peter borrowed Rs. 4000 from a friend at 8% rate of compound interest. At the end of first year, he repaid Rs.1320. What sum should he pay at the end of second year to clear the debt?
 (a) Rs. 4022 (b) Rs. 4000 (c) Rs. 3529 (d) Rs. 3240
- 18: If the compounded amount at the rate of $6\frac{1}{4}\%$ for 3 years is Rs.4913, then what is the principal?
 (a) Rs.5012 (b) Rs. 4096 (c) Rs. 4100 (d) Rs. 3900

Test for initial comparison

Achievement Test based on 7th standard Gujarat State Board of School Textbooks

Name of the school:

Name of the student:

Class and section:

Date and time of the test:

1. 2.28×11.5 _____

- (a) 23.52 (b) 26.22 (c) 34.22 (d) 54.22

2. The cube root of 512 is

- (a) 6 (b) 8 (c) 7 (d) 9

3) A thing is bought for Rs. 400 and sold at Rs. 480. What is the profit in Percentage?

- (a) 30% (b) 23% (c) 20% (d) 34%

4) Prachi bought old scooter through a broker for Rs.9600 by paying 2% brokerage. How much amount had Prachi to pay for the scooter?

- (a) Rs.9792 (b) Rs. 9670 (c) Rs. 9690 (d) Rs.9780

5) As Shiva is going abroad, he sells his motorcycle worth Rs. 38,000 for Rs. 28,000 through a broker. If the broker charges 2% brokerage then how much loss will Shiva suffer?

- (a) Rs. 10,500 (b) Rs. 10,560 (c) Rs.10, 860 (d) Rs. 10,870

6) A sari trader bought sari worth Rs.600 each at 20% discounts. If he sells each sari for Rs. 520, then how much profit will he get on each sari?

- (a) Rs.50 (b) Rs. 43 (c) Rs. 40 (d) Rs. 53

7) C.P. = Rs. 2350; Additional expense = Rs 50; Loss = 5%; S.P. =?

- (a) Rs. 2280 (b) Rs. 2270 (c) Rs. 2380 (d) Rs. 2355

8) Find the interest and amount of Rs.500 at the rate of 8% for 1 year.×

- (a) Rs. 40, Rs.540 (b) Rs. 50, Rs.550 (c) Rs. 60, Rs.560 (d) Rs. 40, Rs.570

9) Find the interest and amount of Rs. 3650 at the rate of 4% for 45 days.

- (a) Rs.14, Rs.3664 (b) Rs.18, Rs.3668 (c) Rs.17, Rs.3667 (d) Rs.10, Rs.3660

10) Find the compound interest for 2 years for Rs. 1200 at the rate of 5%

- (a) Rs. 124 (b) Rs. 120 (c) Rs. 123 (d) Rs. 133

11) The area of the circle with radius 7cm is

- (a) 150 cm^2 (b) 154 cm^2 (c) 134 cm^2 (d) 130 cm^2

12) The measures of a cuboids' are $10\text{cm} \times 8\text{cm} \times 4\text{cm}$. Volume = _____

- (a) 300 cm^3 (b) 367 cm^3 (c) 343 cm^3 (d) 320 cm^3

13) In a recipe, 3 cups of fruit serves 5 people. How many cups of fruit would serve 100 people?

- (a) 70 cups (b) 90 cups (c) 80 cups (d) 60 cups

14) Express the ratio 15 red marbles out of 50 marbles as a fraction in simplest form.

- (a) $\frac{10}{3}$ (b) $\frac{15}{50}$ (c) $\frac{3}{10}$ (d) $\frac{50}{15}$

15) If we add 10 to a certain number, we get 7. Then the number is

- (a) -5 (b) -3 (c) -15 (d) -4

REACTION SCALE

Instructions for Reaction Scale

Dear students,
Thanks for your cooperation in participation of the experiment conducted in your school for my research project entitled “Development and Implementation of Computer Assisted Instruction in Mathematics for Standard VIII Students”.

Please give your feedback regarding CAI used during the experiment. Read the instructions before filling the reaction scale.

Read the sentence fully and understand what the sentence says. Put tick mark in one of the boxes

SA	A	ND	DA	SD
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given like these against each sentence (whichever you find appropriate about that sentence)
While doing this keep in mind the meaning for the following abbreviations.

- SA- Strongly agree
- A - Agree
- ND- Not decided
- DA- Disagree
- SD- Strongly disagree

(Pramila Gururajan)
The investigator

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Reaction Scale

1	I enjoyed this class compared to normal classroom teaching because this method is more interesting to understand than lectures.	SA	A	ND	DA	SD
2	I like illustrations given in the slides which actually made me learn the lesson.	SA	A	ND	DA	SD
3	Illustrations didn't help me to relate what we learned in mathematics to real life situation.	SA	A	ND	DA	SD
4	CAI is effective way of presentation because there is little stress in learning situation.	SA	A	ND	DA	SD
5	I can learn with my own speed.	SA	A	ND	DA	SD
6	I can immediately test myself because there is lot of practice exercise.	SA	A	ND	DA	SD
7	This method is having more freedom to learn.	SA	A	ND	DA	SD
8	CAI didn't focus on more freedom situation.	SA	A	ND	DA	SD
9	Learning mathematics is fun in this CAI method.	SA	A	ND	DA	SD

10 This method is not good in learning mathematics because my doubts are not cleared.

SA	A	ND	DA	SD
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11 In CAI I can teach myself (self-study) without the help of others.

SA	A	ND	DA	SD
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12 Matter presented in CAI is not very clear.

SA	A	ND	DA	SD
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13 CAI is easy to understand.

SA	A	ND	DA	SD
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14 Animations are distracting in understanding the concept.

SA	A	ND	DA	SD
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15 CAI took more time to understand the concept than usual classroom teaching.

SA	A	ND	DA	SD
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16 Illustrations given in CAI are enough to understand the concept clearly.

SA	A	ND	DA	SD
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17 Matter presented in CAI was logically arranged.

SA	A	ND	DA	SD
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18 Learning through CAI was waste of time.

SA	A	ND	DA	SD
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19 Illustrations given in CAI are related to day today life experiences.

SA	A	ND	DA	SD
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20 Classroom teaching is more enjoyable.

SA	A	ND	DA	SD
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21 The language used in CAI is easy and simple to understand.

SA	A	ND	DA	SD
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22 The exercises given in each chapter is adequate.

SA	A	ND	DA	SD
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23 CAI takes care of previous knowledge in the subject.

SA	A	ND	DA	SD
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24 The solution to the problem is not easy to understand.

SA	A	ND	DA	SD
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25 The exercises helped in understanding the chapter in depth.

SA	A	ND	DA	SD
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26 Solutions didn't help me whenever I was not able to solve the problem.

SA	A	ND	DA	SD
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27 Break given in CAI helped me to refresh my mind.

SA	A	ND	DA	SD
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28 I am feeling tired while going through the slide.

SA	A	ND	DA	SD
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29 Animation shown in CAI is appropriate to help me in understanding the concept.

SA	A	ND	DA	SD
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30 Topic is not introduced properly.

SA	A	ND	DA	SD
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31 CAI does not take care of previous knowledge

SA	A	ND	DA	SD
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(Percentage) needed to understand the present concept.

32 Enough revision is not done in CAI after the topic simple interest.

SA	A	ND	DA	SD
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33 Enough revision is not done in CAI after the topic compound interest.

SA	A	ND	DA	SD
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34 Enough revision is not done in CAI after the topic profit and loss.

SA	A	ND	DA	SD
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35 Remedial (re teaching the difficult concept which is not understood by you) teaching is not done.

SA	A	ND	DA	SD
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36 I had to read the slide many times to understand what is being said as there was no clarity in understanding.

SA	A	ND	DA	SD
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37 Number of questions at the end of the slides for the topic profit and loss is adequate for providing practice.

SA	A	ND	DA	SD
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38 Number of questions at the end of the slides for the topic simple interest is adequate for providing practice.

SA	A	ND	DA	SD
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39 Number of questions at the end of the slides for the topic compound interest is adequate for providing practice.

SA	A	ND	DA	SD
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40 CAI is not enough in understanding the concept very clearly.

SA	A	ND	DA	SD
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- 51

Discussion with mathematics teacher is needed along with CAI.
- 52

Evaluation done at the end of the topic profit and loss is suitable measure to know my understanding about that topic.
- 53

Evaluation done at the end of the topic “simple interest” is suitable measure to know my understanding about that topic.
- 54

Evaluation done at the end of the topic compound interest is suitable measure to know my understanding about that topic.

SA	A	ND	DA	SD
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SA	A	ND	DA	SD
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SA	A	ND	DA	SD
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SA	A	ND	DA	SD
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