SEKOLAH KRISTEN GLORIA

**LESSON PLAN**
**Subject : ENGLISH**

Grade : VIII A - E
Meeting : 1
Applied Lesson date:
Time : 2 x 45 minutes
Topic : Sport
Language area : Writing
Spiritual Link : We should not give up eventhough in a very difficult situation because God will help us.

Objective : Students are able to:
1. understand the pictures.
2. answer the questions about the pictures provided.
3. write a narrative composition based on the pictures.

Teaching aids/materials : Picture series

Source : Guided English Skills (Composition, Comprehension, Vocabulary & Use of English) page 23.

A. Warm up :
Triggering questions:
1. Who is the girl in the picture?
2. What happened to her?
3. What do you think that she did after the accident?
4. Did she finally win the competition?Explain it!

B. Presentation :
1. Teacher helps students to comprehend the pictures by giving guided questions:
   * What is the picture about?
   * What happened to the girl?
   * Was she disapointed?
   * What do you think she did after that?
   * Did she finally win the competition?

2. Teacher gives these words and phrases that can help them: *practising, twisted her right wrist, racquet, with determination, succeeded and congratulated.*

C. Practice :
1. Asking students to study and comprehend the picture series.
2. Giving them chance to ask about the pictures.
3. Giving students time to answer the questions.
4. Asking them to write a narrative composition based on the picture series provided and consist of 150 words.

D. Comments/Notes :

# 5-5 Picture Composition

THE LEFT-HANDED BADMINTON PLAYER (A Narrative Composition)

Christine was a good badminton player. She had been chosen by her school to play in the Inter-school Badminton Championship. While practising, she tripped, fell and twisted her right wrist. Look at the six pictures carefully and answer these questions orally.

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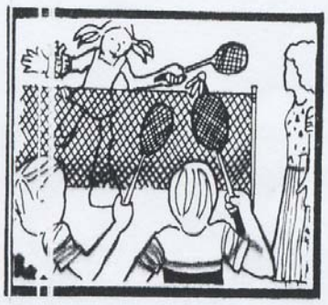
4 

5 

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1. What was Christine doing? (Picture 1)
2. What happened to her? (Picture 2)
3. What did the doctor do to her right wrist?
4. What do you think that the doctor told her not to do?
5. Was she disappointed? (Picture 3)
6. How did her mother comfort her?
7. What do you think that she did after that?
8. Which hand did Christine use to play during the competition?
9. Did she win the competition?
10. What did her mother and her two brothers do with Christine after the competition?

SEKOLAH KRISTEN GLORIA

**LESSON PLAN**
**Subject : ENGLISH**

Grade : VIII A - E
Applied Lesson date:
Topic : The Box of Treasure
Spiritual Link :

Meeting : 2
Time : 2 x 45 minutes
Language area : Writing

Objective : Students are able to:
1. arrange the pictures in a good order.
2. comprehend the picture series.
3. answer the questions based on the picture series.
4. write a narrative composition based on the picture series provided.

Teaching aids/materials : Picture series

Source : Guided English Skills (Composition, Comprehension, Vocabulary & Use of English) page 55.

A. Warm up :
1. Asking students to form 6 groups; and then asking them to re-arrange the pictures into a good order.
2. Discussing the pictures one by one by asking students to give opinions about each pictures.

B. Presentation :
1. Teacher helps students to comprehend the picture series.
   * What did the man do every day?
   * What happened to his axe one day?
   * Did he find his axe?
   * What did he find?
   * What did he do after he found a surprise?

2. Teacher gives some useful words and phrases: *hot day, rested for a while, pool, axe fell, dived into the pool, old box, used stone to break the lock, filled with surprised and joy, wife also delighted and live happily ever after.*

C. Practice :
1. Giving students time to answer the questions based on the pictures.
2. Giving students opportunity to ask about the pictures.
3. Asking students to write a narrative composition based on the picture series and consists of 150 words.

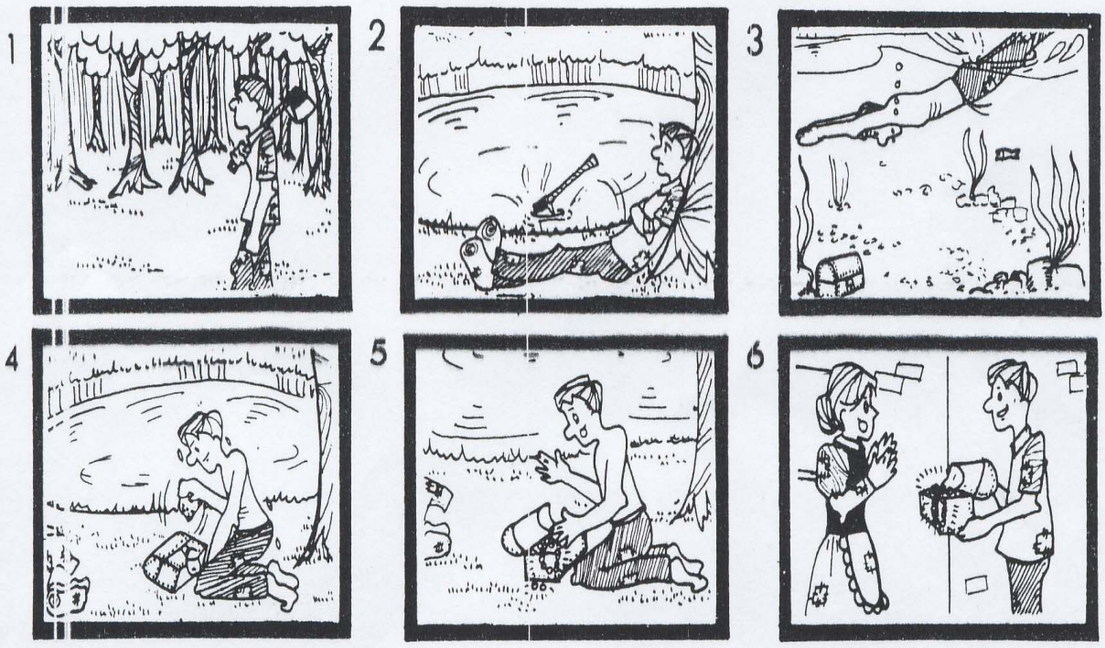
D. Comments/Notes :

# 12-5 Picture Composition

THE BOX OF TREASURE (A Narrative Composition)

Joe, a poor woodcutter, found a box of jewels while he was searching for his lost axe in a pool. Study closely the pictures. Answer the questions below orally after this.

1. Who was Joe?
2. What did he do every day? (Picture 1)
3. What happened to his axe one day?
4. What did he do? (Picture 3)
5. Did he find his axe?
6. What did he find instead?
7. What did he do with it? (Picture 4)
8. Why did he look so surprised and happy? (Picture 5)
9. Describe how his wife felt when he showed her what he had found.



SEKOLAH KRISTEN GLORIA

**LESSON PLAN**
**Subject : ENGLISH**

Grade : VIII A - E
Applied Lesson date:
Topic : Helping the Orphans
Spiritual Link : We have to help each other.

Meeting : 3
Time : 2 x 45 minutes
Language area : Writing

Objective : Students are able to:
1. comprehend the picture series.
2. write an interesting narrative composition based on the pictures.

Teaching aids/materials : Picture series

Source : Guided English Skills (Composition, Comprehension, Vocabulary & Use of English) page 118.

A. Warm up :
1. Teacher gives an interesting start of a story, for example *This week is 'Charity Week' and our school is collecting money and whatever else that we can give to the orphanage in town ... ....*
2. Teacher asks students to continue the story; each student writes one sentence (in 5min) and ask them to write it quickly.
3. The last student reads the story.

B. Presentation :
1. Teacher helps students with the vocabulary (*orphanage, contributed, textile shop, making dress, hemmed, sewed, fixed buttons, thanked the girls and lady in charge).*

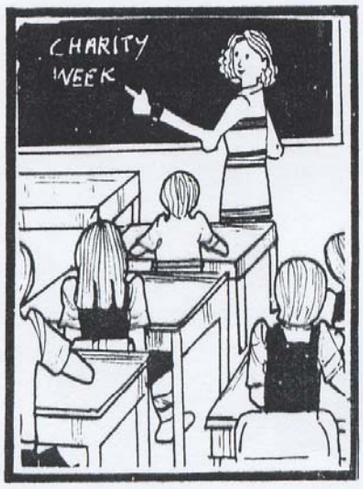
C. Practice :
1. Giving the picture series to the students and ask them to comprehend the pictures.
2. Giving them chance to ask about the pictures.
3. Asking them to write a narrative composition, consists of 150 words.

D. Comments/Notes :

# 26-5 Picture Composition

HELPING THE ORPHANS (A Narrative Composition)

It was 'Charity Week' at Wendy's school. Miss Martin told her pupils about it and asked them to help in whatever way they could. Wendy and her friends decided to help. Now, tell the story from the six pictures. Then, answer the following questions orally.

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# GLORIA CHRISTIAN JUNIOR HIGH SCHOOL

**Second Grade, Second Semester 2006/2007**

**WRITING TEST**

Remember your wonderful experience that happened in your life. Then, write a narrative composition about your experience (at least 150 words). You may use these words: *holiday, unforgettable moment, filled with joy/happiness or even sadness, rested from daily activities, a new experience, a lucky boy, and living in a quiet place*.

VISUAL – AUDITORY – KINESTHETIC (V-A-K) ASSESSMENT

Mark the appropriate box for each question. Tally your score for each section. Then graph your results.

VISUAL

| No | Questions | Often | Sometimes | Seldom |
|---|---|---|---|---|
| 1. | Are you neat and orderly? | | | |
| 2. | Do you speak quickly? | | | |
| 3. | Are you good long-range planner and organizer? | | | |
| 4. | Are you a good speller and can you actually see the words in your mind? | | | |
| 5. | Do you remember what was seen rather than heard? | | | |
| 6. | Do you memorize by visual association? | | | |
| 7. | Do you have trouble remembering verbal instructions unless they are written down and do you often ask people to repeat themselves? | | | |
| 8. | Would you rather read than be read to? | | | |
| 9. | Do you doodle during phone conversations/staff meetings? | | | |
| 10. | Would you rather do a demonstration than make a speech? | | | |
| 11. | Do you like art more than music? | | | |
| 12. | Do you know what to say but can't think of the right words? | | | |
| Subtotals | | | | |
| | | X 2 | X 1 | X 0 |
| Totals | | | | |

AUDITORY

| No | Questions | Often | Sometimes | Seldom |
|---|---|---|---|---|
| 1. | Do you talk to yourself while working? | | | |
| 2. | Are you easily distracted by noise? | | | |
| 3. | Do you move your lips/pronounce the words as you read? | | | |
| 4. | Do you enjoy reading aloud and listening? | | | |
| 5. | Can you repeat back and mimic tone, pitch and timbre? | | | |
| 6. | Do you find writing difficult but are better at telling? | | | |
| 7. | Do you speak in rhythmic patterns? | | | |
| 8. | Do you think you're an eloquent speaker? | | | |
| 9. | Do you like music more than art? | | | |
| 10. | Do you learn by listening and remember what was discussed rather than seen? | | | |
| 11. | Are you talkative, love discussion and go into lengthy descriptions? | | | |
| 12. | Can you spell better out loud than in writing? | | | |
| Subtotals | | | | |
| | | X 2 | X 1 | X 0 |
| Totals | | | | |
| | | | | |

| GRADE VIII A | | | PRE-TEST | | POST-TEST | |
|---|---|---|---|---|---|---|
| **NO** | **LEARNING STYLES** | **SCORES** | **RATER 1** | **RATER 2** | **RATER 1** | **RATER 2** |
| 1 | VISUAL | 16 | 7 | 7 | 8.5 | 8 |
| 2 | | 16 | 6 | 7 | 7.5 | 7 |
| 3 | | 16 | 8 | 7.8 | 9 | 9 |
| 4 | | 16 | 7.5 | 7 | 8.3 | 8.5 |
| 5 | | 15 | 7.3 | 7.5 | 8 | 8.4 |
| 6 | | 14 | 7 | 6.8 | 7.8 | 7.5 |
| 7 | | 13 | 6.8 | 6.5 | 7.4 | 7.6 |
| 8 | | 13 | 6.9 | 6.5 | 7 | 7.2 |
| 9 | | 12 | 8 | 8.3 | 8.8 | 9.2 |
| 10 | AUDITORY | 21 | 8 | 8.2 | 8.5 | 8.7 |
| 11 | | 19 | 7.6 | 7.9 | 8.4 | 8 |
| 12 | | 17 | 8.5 | 8.2 | 8.5 | 8.9 |
| 13 | | 16 | 7 | 6.5 | 7.5 | 7.3 |
| 14 | | 16 | 7.6 | 7.5 | 8.2 | 8.5 |
| 15 | | 15 | 7.8 | 7.5 | 8.8 | 9.1 |
| 16 | | 15 | 9 | 9.5 | 9 | 9.3 |
| 17 | | 11 | 9 | 8 | 8.6 | 8.5 |
| 18 | KINESTHETIC | 18 | 7.8 | 8.1 | 9 | 8.6 |
| 19 | | 16 | 7.4 | 7 | 8 | 8 |
| 20 | | 15 | 7.7 | 7.9 | 8.3 | 8 |
| 21 | | 15 | 8.6 | 8.5 | 8.6 | 9 |
| 22 | | 12 | 7 | 7.6 | 8 | 8.3 |
| | **AVERAGE** | | **7.61** | **7.58** | **8.26** | **8.3** |

TABLE

**CALCULATION OF CORELATION**

**( PREETEST )**

| NO. | R 1 | R2 | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| | X | Y | | | |
| 1 | 7 | 7 | 49 | 49 | 49 |
| 2 | 6 | 7 | 36 | 49 | 42 |
| 3 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 4 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 5 | 7.3 | 7.5 | 53.29 | 56.25 | 54.75 |
| 6 | 7 | 6.8 | 49 | 46.24 | 47.6 |
| 7 | 6.8 | 6.5 | 46.24 | 42.25 | 44.2 |
| 8 | 6.9 | 6.5 | 47.61 | 42.25 | 44.85 |
| 9 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 10 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 11 | 7.6 | 7.9 | 57.76 | 62.41 | 60.04 |
| 12 | 8.5 | 8.2 | 72.25 | 67.24 | 69.7 |
| 13 | 7 | 6.5 | 49 | 42.25 | 45.5 |
| 14 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 15 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 16 | 9 | 9.5 | 81 | 90.25 | 85.5 |
| 17 | 9 | 8 | 81 | 64 | 72 |
| 18 | 7.8 | 8.1 | 60.84 | 65.61 | 63.18 |
| 19 | 7.4 | 7 | 54.76 | 49 | 51.8 |
| 20 | 7.7 | 7.9 | 59.29 | 62.41 | 60.83 |
| 21 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 22 | 7 | 7.6 | 49 | 57.76 | 53.2 |
| 23 | 8 | 8 | 64 | 64 | 64 |
| 24 | 7.7 | 7.5 | 59.29 | 56.25 | 57.75 |
| 25 | 7.8 | 7.8 | 60.84 | 60.84 | 60.84 |
| 26 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 27 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 28 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 29 | 8.5 | 8 | 72.25 | 64 | 68 |
| 30 | 7 | 7.4 | 49 | 54.76 | 51.8 |
| 31 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 32 | 6 | 6.8 | 36 | 46.24 | 40.8 |
| 33 | 7.7 | 8 | 59.29 | 64 | 61.6 |
| 34 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 35 | 7.5 | 7.9 | 56.25 | 62.41 | 59.25 |
| 36 | 6.5 | 6.3 | 42.25 | 39.69 | 40.95 |

| | | | | | |
|---|---|---|---|---|---|
| 37 | 8.5 | 8.6 | 72.25 | 73.96 | 73.1 |
| 38 | 8 | 7.5 | 64 | 56.25 | 60 |
| 39 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 40 | 7.5 | 7.2 | 56.25 | 51.84 | 54 |
| 41 | 8.5 | 8 | 72.25 | 64 | 68 |
| 42 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 43 | 6 | 7 | 36 | 49 | 42 |
| 44 | 7.6 | 8 | 57.76 | 64 | 60.8 |
| 45 | 8 | 7.6 | 64 | 57.76 | 60.8 |
| 46 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 47 | 7.5 | 7.5 | 56.25 | 56.25 | 56.25 |
| 48 | 8 | 8 | 64 | 64 | 64 |
| 49 | 7.8 | 8 | 60.84 | 64 | 62.4 |
| 50 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 51 | 7.5 | 7.8 | 56.25 | 60.84 | 58.5 |
| 52 | 7.5 | 8 | 56.25 | 64 | 60 |
| 53 | 7 | 7.6 | 49 | 57.76 | 53.2 |
| 54 | 7.9 | 8 | 62.41 | 64 | 63.2 |
| 55 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 56 | 8 | 8.1 | 64 | 65.61 | 64.8 |
| 57 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 58 | 7 | 7.5 | 49 | 56.25 | 52.5 |
| 59 | 7.5 | 7.6 | 56.25 | 57.76 | 57 |
| 60 | 8 | 8 | 64 | 64 | 64 |
| 61 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 62 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 63 | 7 | 7.5 | 49 | 56.25 | 52.5 |
| 64 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 65 | 7.6 | 8 | 57.76 | 64 | 60.8 |
| 66 | 8 | 8 | 64 | 64 | 64 |
| 67 | 7 | 7.4 | 49 | 54.76 | 51.8 |
| 68 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| **TOTAL** | 517.4 | 523.6 | 3963.12 | 4052.82 | 4002.04 |
| **n =** | 68 | | | | |

$$r = \frac{n\Sigma xy - \Sigma x \cdot \Sigma y}{\sqrt{\left[n\Sigma x^2 - (\Sigma x)^2\right]\left[n\Sigma y^2 - (\Sigma y)^2\right]}} = 0.766$$

TEST OF CORRELATION SIGNIFICANCE:

1. HYPOTHESIS FORMULATION:
   Ho : r = 0 ; there is no correlation between x and y
   Ha : r ≠ 0 ; there is a correlation between x and y

2. 5% significance level, r table = 0.24
   Ho is rejected if |r calculation| > r table

3. CONCLUSION:
   Since |r calculation| = 0.766 > r table , Ho is rejected.
   So there is a significant correlation between x and y.

TABLE

**CALCULATION OF CORELATION**

**( POSTTEST )**

| NO. | R 1 | R2 | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| | X | Y | | | |
| 1 | 8.5 | 8 | 72.25 | 64 | 68 |
| 2 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 3 | 9 | 9 | 81 | 81 | 81 |
| 4 | 8.3 | 8.5 | 68.89 | 72.25 | 70.55 |
| 5 | 8 | 8.4 | 64 | 70.56 | 67.2 |
| 6 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 7 | 7.4 | 7.6 | 54.76 | 57.76 | 56.24 |
| 8 | 7 | 7.2 | 49 | 51.84 | 50.4 |
| 9 | 8.8 | 9.2 | 77.44 | 84.64 | 80.96 |
| 10 | 8.5 | 8.7 | 72.25 | 75.69 | 73.95 |
| 11 | 8.4 | 8 | 70.56 | 64 | 67.2 |
| 12 | 8.5 | 8.9 | 72.25 | 79.21 | 75.65 |
| 13 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| 14 | 8.2 | 8.5 | 67.24 | 72.25 | 69.7 |
| 15 | 8.8 | 9.1 | 77.44 | 82.81 | 80.08 |
| 16 | 9 | 9.3 | 81 | 86.49 | 83.7 |
| 17 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 18 | 9 | 8.6 | 81 | 73.96 | 77.4 |
| 19 | 8 | 8 | 64 | 64 | 64 |
| 20 | 8.3 | 8 | 68.89 | 64 | 66.4 |
| 21 | 8.6 | 9 | 73.96 | 81 | 77.4 |
| 22 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 23 | 9 | 9.3 | 81 | 86.49 | 83.7 |
| 24 | 8.5 | 8.3 | 72.25 | 68.89 | 70.55 |
| 25 | 8.4 | 8 | 70.56 | 64 | 67.2 |
| 26 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 27 | 9.1 | 8.8 | 82.81 | 77.44 | 80.08 |
| 28 | 8.7 | 8.8 | 75.69 | 77.44 | 76.56 |
| 29 | 8.5 | 8.4 | 72.25 | 70.56 | 71.4 |
| 30 | 7.9 | 8.3 | 62.41 | 68.89 | 65.57 |
| 31 | 8 | 8.1 | 64 | 65.61 | 64.8 |
| 32 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| 33 | 8.4 | 8.8 | 70.56 | 77.44 | 73.92 |
| 34 | 8.9 | 8.5 | 79.21 | 72.25 | 75.65 |
| 35 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 36 | 7.4 | 7.6 | 54.76 | 57.76 | 56.24 |

| | | | | | |
|---|---|---|---|---|---|
| 37 | 9.1 | 9 | 82.81 | 81 | 81.9 |
| 38 | 8.3 | 8.7 | 68.89 | 75.69 | 72.21 |
| 39 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 40 | 7.9 | 7.8 | 62.41 | 60.84 | 61.62 |
| 41 | 8.5 | 8.6 | 72.25 | 73.96 | 73.1 |
| 42 | 8 | 8.7 | 64 | 75.69 | 69.6 |
| 43 | 7 | 6.9 | 49 | 47.61 | 48.3 |
| 44 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 45 | 8 | 8 | 64 | 64 | 64 |
| 46 | 8.8 | 9.1 | 77.44 | 82.81 | 80.08 |
| 47 | 8.3 | 8.7 | 68.89 | 75.69 | 72.21 |
| 48 | 8.5 | 8.3 | 72.25 | 68.89 | 70.55 |
| 49 | 8 | 8.4 | 64 | 70.56 | 67.2 |
| 50 | 8 | 8.5 | 64 | 72.25 | 68 |
| 51 | 8.2 | 8.7 | 67.24 | 75.69 | 71.34 |
| 52 | 8.5 | 9 | 72.25 | 81 | 76.5 |
| 53 | 8.4 | 8.8 | 70.56 | 77.44 | 73.92 |
| 54 | 8.7 | 9.3 | 75.69 | 86.49 | 80.91 |
| 55 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 56 | 8.4 | 8.6 | 70.56 | 73.96 | 72.24 |
| 57 | 7.9 | 8.1 | 62.41 | 65.61 | 63.99 |
| 58 | 7.5 | 8.3 | 56.25 | 68.89 | 62.25 |
| 59 | 8.1 | 8 | 65.61 | 64 | 64.8 |
| 60 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 61 | 8.5 | 8.5 | 72.25 | 72.25 | 72.25 |
| 62 | 7.6 | 7.8 | 57.76 | 60.84 | 59.28 |
| 63 | 7.5 | 7.4 | 56.25 | 54.76 | 55.5 |
| 64 | 8 | 7.7 | 64 | 59.29 | 61.6 |
| 65 | 7.9 | 8 | 62.41 | 64 | 63.2 |
| 66 | 7.8 | 8.4 | 60.84 | 70.56 | 65.52 |
| 67 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 68 | 8.4 | 8.6 | 70.56 | 73.96 | 72.24 |
| **TOTAL** | 558 | 563.8 | 4595.52 | 4697.36 | 4642.91 |
| **n =** | 68 | | | | |

$$r = \frac{n\Sigma xy - \Sigma x \cdot \Sigma y}{\sqrt{\left[n\Sigma x^2 - (\Sigma x)^2\right]\left[n\Sigma y^2 - (\Sigma y)^2\right]}} = 0.844$$

TEST OF CORRELATION SIGNIFICANCE:

1. HYPOTHESIS FORMULATION:
   Ho : r = 0 ; there is no correlation between x and y
   Ho : r ≠ 0 ; there is a correlation between x and y

2. 5% significance level, r table = 0.235
   Ho is rejected if |r calculation| > r table

3. CONCLUSION:
   Since |r calculation| = 0.844 > r table , Ho is rejected.
   So there is a significant correlation between x and y.

## CALCULATION FOR PAIR t-TEST
## (KINESTHETIC)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.8 | 7.95 | 0.85 | 0.7225 |
| 2 | 8 | 7.2 | 0.8 | 0.64 |
| 3 | 8.15 | 7.8 | 0.35 | 0.1225 |
| 4 | 8.8 | 8.55 | 0.25 | 0.0625 |
| 5 | 8.15 | 7.3 | 0.85 | 0.7225 |
| 6 | 8.1 | 7.7 | 0.4 | 0.16 |
| 7 | 7.5 | 6.4 | 1.1 | 1.21 |
| 8 | 9.05 | 8.55 | 0.5 | 0.25 |
| 9 | 8.5 | 7.75 | 0.75 | 0.5625 |
| 10 | 7.55 | 7.4 | 0.15 | 0.0225 |
| 11 | 7.85 | 7.35 | 0.5 | 0.25 |
| 12 | 8.55 | 8.25 | 0.3 | 0.09 |
| 13 | 8.35 | 8.1 | 0.25 | 0.0625 |
| 14 | 6.95 | 6.5 | 0.45 | 0.2025 |
| 15 | 8.55 | 7.8 | 0.75 | 0.5625 |
| 16 | 8 | 7.8 | 0.2 | 0.04 |
| 17 | 7.9 | 8 | -0.1 | 0.01 |
| 18 | 8.5 | 8.15 | 0.35 | 0.1225 |
| 19 | 7.7 | 7.4 | 0.3 | 0.09 |
| 20 | 7.45 | 7.25 | 0.2 | 0.04 |
| 21 | 7.85 | 7.25 | 0.6 | 0.36 |
| 22 | 7.95 | 7.8 | 0.15 | 0.0225 |
| 23 | 8.1 | 8 | 0.1 | 0.01 |
| 24 | 7.55 | 7.2 | 0.35 | 0.1225 |
| 25 | 8.5 | 7.4 | 1.1 | 1.21 |
| Total | — | — | 11.5 | 7.67 |
| n | — | — | 25 | — |
| Mean | — | — | 0.46 | — |
| SD | — | — | 0.31490739 | — |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 24
   t(5%) = 1.711

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.46 \qquad n = 25$$

$$s_D = \sqrt{\frac{n(D^2 - (\sum D)^2}{n(n-1)}} = 0.3149$$

$$t_o = \frac{\bar{D}}{S_D/\sqrt{n}} = 7.3037$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.

## CALCULATION FOR PAIR t-TEST

## (VISUAL)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.25 | 7 | 1.25 | 1.5625 |
| 2 | 7.25 | 6.5 | 0.75 | 0.5625 |
| 3 | 9 | 7.9 | 1.1 | 1.21 |
| 4 | 8.4 | 7.25 | 1.15 | 1.3225 |
| 5 | 8.2 | 7.4 | 0.8 | 0.64 |
| 6 | 7.65 | 6.9 | 0.75 | 0.5625 |
| 7 | 7.5 | 6.65 | 0.85 | 0.7225 |
| 8 | 7.1 | 6.7 | 0.4 | 0.16 |
| 9 | 9 | 8.15 | 0.85 | 0.7225 |
| 10 | 9.15 | 8 | 1.15 | 1.3225 |
| 11 | 8.4 | 7.6 | 0.8 | 0.64 |
| 12 | 8.2 | 7.8 | 0.4 | 0.16 |
| 13 | 7.9 | 7.65 | 0.25 | 0.0625 |
| 14 | 8.95 | 8.15 | 0.8 | 0.64 |
| 15 | 8.75 | 8.1 | 0.65 | 0.4225 |
| 16 | 8.45 | 8.25 | 0.2 | 0.04 |
| 17 | 8.1 | 7.2 | 0.9 | 0.81 |
| 18 | 8.95 | 8.15 | 0.8 | 0.64 |
| 19 | 8.5 | 7.5 | 1 | 1 |
| 20 | 8.4 | 8 | 0.4 | 0.16 |
| 21 | 8.2 | 7.9 | 0.3 | 0.09 |
| 22 | 8.25 | 8.1 | 0.15 | 0.0225 |
| 23 | 8.45 | 7.65 | 0.8 | 0.64 |
| 24 | 8.75 | 7.75 | 1 | 1 |
| 25 | 8.6 | 7.3 | 1.3 | 1.69 |
| 26 | 9 | 7.95 | 1.05 | 1.1025 |
| **Total** | --- | --- | **19.85** | **17.9075** |
| **n** | --- | --- | **26** | --- |
| **Mean** | --- | --- | **0.76346154** | --- |
| **SD** | --- | --- | **0.33183059** | --- |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 25
   t(5%) = 1.708

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.7635 \qquad n = 26$$

$$s_D = \sqrt{\frac{n(D^2 - (\sum D)^2}{n(n-1)}} = 0.3318$$

$$t_o = \frac{\bar{D}}{S_D / \sqrt{n}} = 11.732$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.

## CALCULATION FOR PAIR t-TEST
## (AUDITORY)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.6 | 8.1 | 0.5 | 0.25 |
| 2 | 8.2 | 7.75 | 0.45 | 0.2025 |
| 3 | 8.7 | 8.35 | 0.35 | 0.1225 |
| 4 | 7.4 | 6.75 | 0.65 | 0.4225 |
| 5 | 8.35 | 7.55 | 0.8 | 0.64 |
| 6 | 8.95 | 7.65 | 1.3 | 1.69 |
| 7 | 9.15 | 9.25 | -0.1 | 0.01 |
| 8 | 8.55 | 8.5 | 0.05 | 0.0025 |
| 9 | 8.05 | 7.55 | 0.5 | 0.25 |
| 10 | 7.4 | 6.4 | 1 | 1 |
| 11 | 8.6 | 7.85 | 0.75 | 0.5625 |
| 12 | 8.7 | 8.1 | 0.6 | 0.36 |
| 13 | 8.1 | 8.1 | 0 | 0 |
| 14 | 8.5 | 8.05 | 0.45 | 0.2025 |
| 15 | 8 | 7.4 | 0.6 | 0.36 |
| 16 | 7.9 | 7.25 | 0.65 | 0.4225 |
| 17 | 8.05 | 7.55 | 0.5 | 0.25 |
| **Total** | — | — | **9.05** | **6.7475** |
| **n** | — | — | **17** | — |
| **Mean** | — | — | **0.53235294** | — |
| **SD** | — | — | **0.34728463** | — |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 16
   t(5%) = 1.746

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.5324 \qquad n = 17$$

$$s_D = \sqrt{\frac{n\,(D^2 - (\sum D)^2}{n(n-1)}} = 0.3473$$

$$t_o = \frac{\bar{D}}{S_D / \sqrt{n}} = 6.3203$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.

KINESTHETIC

| No | Questions | Often | Sometimes | Seldom |
|---|---|---|---|---|
| 1. | Do you speak slowly? | | | |
| 2. | Do you touch people to get their attention? | | | |
| 3. | Do you stand close when talking to someone? | | | |
| 4. | Are you physically oriented and move a lot? | | | |
| 5. | Do you learn by manipulating and doing? | | | |
| 6. | Do you memorize by walking and seeing? | | | |
| 7. | Do you use a finger as a pointer when reading? | | | |
| 8. | Do you gesture a lot? | | | |
| 9. | Do you have difficulty sitting still for long periods? | | | |
| 10. | Do you make decisions based on your feelings? | | | |
| 11. | Do you tap your pen, fingers or foot while listening? | | | |
| 12. | Do you spend time playing sports and physical activities? | | | |
| Subtotals | | | | |
| | | X 2 | X 1 | X 0 |
| Totals | | | | |

| | | | |
|---|---|---|---|
| 24 | | | |
| 23 | | | |
| 22 | | | |
| 21 | | | |
| 20 | | | |
| 19 | | | |
| 18 | | | |
| 17 | | | |
| 16 | | | |
| 15 | | | |
| 14 | | | |
| 13 | | | |
| 12 | | | |
| 11 | | | |
| 10 | | | |
| 9 | | | |
| 8 | | | |
| 7 | | | |
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |
| | V | A | K |

Fill in the graph with your score

| GRADE VIII A | | | PRE-TEST | | POST-TEST | |
|---|---|---|---|---|---|---|
| **NO** | **LEARNING STYLES** | **SCORES** | **RATER 1** | **RATER 2** | **RATER 1** | **RATER 2** |
| 1 | VISUAL | 16 | 7 | 7 | 8.5 | 8 |
| 2 | | 16 | 6 | 7 | 7.5 | 7 |
| 3 | | 16 | 8 | 7.8 | 9 | 9 |
| 4 | | 16 | 7.5 | 7 | 8.3 | 8.5 |
| 5 | | 15 | 7.3 | 7.5 | 8 | 8.4 |
| 6 | | 14 | 7 | 6.8 | 7.8 | 7.5 |
| 7 | | 13 | 6.8 | 6.5 | 7.4 | 7.6 |
| 8 | | 13 | 6.9 | 6.5 | 7 | 7.2 |
| 9 | | 12 | 8 | 8.3 | 8.8 | 9.2 |
| 10 | AUDITORY | 21 | 8 | 8.2 | 8.5 | 8.7 |
| 11 | | 19 | 7.6 | 7.9 | 8.4 | 8 |
| 12 | | 17 | 8.5 | 8.2 | 8.5 | 8.9 |
| 13 | | 16 | 7 | 6.5 | 7.5 | 7.3 |
| 14 | | 16 | 7.6 | 7.5 | 8.2 | 8.5 |
| 15 | | 15 | 7.8 | 7.5 | 8.8 | 9.1 |
| 16 | | 15 | 9 | 9.5 | 9 | 9.3 |
| 17 | | 11 | 9 | 8 | 8.6 | 8.5 |
| 18 | KINESTHETIC | 18 | 7.8 | 8.1 | 9 | 8.6 |
| 19 | | 16 | 7.4 | 7 | 8 | 8 |
| 20 | | 15 | 7.7 | 7.9 | 8.3 | 8 |
| 21 | | 15 | 8.6 | 8.5 | 8.6 | 9 |
| 22 | | 12 | 7 | 7.6 | 8 | 8.3 |
| | **AVERAGE** | | **7.61** | **7.58** | **8.26** | **8.3** |

| GRADE VIII C | | | PRE-TEST | | POST-TEST | |
|---|---|---|---|---|---|---|
| **NO** | **LEARNING STYLES** | **SCORE** | **RATER 1** | **RATER 2** | **RATER 1** | **RATER 2** |
| 1 | VISUAL | 17 | 8 | 8 | 9 | 9.3 |
| 2 | | 17 | 7.7 | 7.5 | 8.5 | 8.3 |
| 3 | | 16 | 7.8 | 7.8 | 8.4 | 8 |
| 4 | | 16 | 7.8 | 7.5 | 8 | 7.8 |
| 5 | | 15 | 8 | 8.3 | 9.1 | 8.8 |
| 6 | | 14 | 8.2 | 8 | 8.7 | 8.8 |
| 7 | | 12 | 8.5 | 8 | 8.5 | 8.4 |
| 8 | | 9 | 7 | 7.4 | 7.9 | 8.3 |
| 9 | AUDITORY | 18 | 7.6 | 7.5 | 8 | 8.1 |
| 10 | | 17 | 6 | 6.8 | 7.5 | 7.3 |
| 11 | | 15 | 7.7 | 8 | 8.4 | 8.8 |
| 12 | | 14 | 8 | 8.2 | 8.9 | 8.5 |
| 13 | KINESTHETIC | 22 | 7.5 | 7.9 | 8.2 | 8 |
| 14 | | 18 | 6.5 | 6.3 | 7.4 | 7.6 |
| 15 | | 18 | 8.5 | 8.6 | 9.1 | 9 |
| 16 | | 18 | 8 | 7.5 | 8.3 | 8.7 |
| 17 | | 17 | 7 | 7.8 | 7.6 | 7.5 |
| 18 | | 17 | 7.5 | 7.2 | 7.9 | 7.8 |
| 19 | | 16 | 8.5 | 8 | 8.5 | 8.6 |
| 20 | | 16 | 8.2 | 8 | 8 | 8.7 |
| 21 | | 13 | 6 | 7 | 7 | 6.9 |
| 22 | | 13 | 7.6 | 8 | 8.6 | 8.5 |
| 23 | | 11 | 8 | 7.6 | 8 | 8 |
| | **AVERAGE** | | **7.98** | **8.04** | **8.61** | **8.62** |

| GRADE VIII D | | | PRE-TEST | | POST-TEST | |
|---|---|---|---|---|---|---|
| **NO** | **LEARNING STYLES** | **SCORE** | **RATER 1** | **RATER 2** | **RATER 1** | **RATER 2** |
| 1 | VISUAL | 17 | 8 | 8.3 | 8.8 | 9.1 |
| 2 | | 17 | 7.5 | 7.5 | 8.3 | 8.7 |
| 3 | | 16 | 8 | 8 | 8.5 | 8.3 |
| 4 | | 15 | 7.8 | 8 | 8 | 8.4 |
| 5 | | 15 | 8 | 8.2 | 8 | 8.5 |
| 6 | | 14 | 7.5 | 7.8 | 8.2 | 8.7 |
| 7 | | 12 | 7.5 | 8 | 8.5 | 9 |
| 8 | | 12 | 7 | 7.6 | 8.4 | 8.8 |
| 9 | | 12 | 7.9 | 8 | 8.7 | 9.3 |
| 10 | AUDITORY | 17 | 8 | 8.2 | 8.2 | 8 |
| 11 | | 17 | 8 | 8.1 | 8.4 | 8.6 |
| 12 | | 13 | 7 | 7.8 | 7.9 | 8.1 |
| 13 | | 13 | 7 | 7.5 | 7.5 | 8.3 |
| 14 | | 12 | 7.5 | 7.6 | 8.1 | 8 |
| 15 | KINESTHETIC | 17 | 8 | 8 | 8 | 7.8 |
| 16 | | 15 | 8 | 8.3 | 8.5 | 8.5 |
| 17 | | 15 | 7 | 7.8 | 7.6 | 7.8 |
| 18 | | 14 | 7 | 7.5 | 7.5 | 7.4 |
| 19 | | 13 | 7.5 | 7 | 8 | 7.7 |
| 20 | | 13 | 7.6 | 8 | 7.9 | 8 |
| 21 | | 13 | 8 | 8 | 7.8 | 8.4 |
| 22 | | 11 | 7 | 7.4 | 7.6 | 7.5 |
| 23 | | 11 | 7.5 | 7.3 | 8.4 | 8.6 |
| | **AVERAGE** | | **7.92** | **8.18** | **8.49** | **8.70** |

TABLE

**CALCULATION OF CORELATION**

**( PREETEST )**

| NO. | R 1 | R2 | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| | X | Y | | | |
| 1 | 7 | 7 | 49 | 49 | 49 |
| 2 | 6 | 7 | 36 | 49 | 42 |
| 3 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 4 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 5 | 7.3 | 7.5 | 53.29 | 56.25 | 54.75 |
| 6 | 7 | 6.8 | 49 | 46.24 | 47.6 |
| 7 | 6.8 | 6.5 | 46.24 | 42.25 | 44.2 |
| 8 | 6.9 | 6.5 | 47.61 | 42.25 | 44.85 |
| 9 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 10 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 11 | 7.6 | 7.9 | 57.76 | 62.41 | 60.04 |
| 12 | 8.5 | 8.2 | 72.25 | 67.24 | 69.7 |
| 13 | 7 | 6.5 | 49 | 42.25 | 45.5 |
| 14 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 15 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 16 | 9 | 9.5 | 81 | 90.25 | 85.5 |
| 17 | 9 | 8 | 81 | 64 | 72 |
| 18 | 7.8 | 8.1 | 60.84 | 65.61 | 63.18 |
| 19 | 7.4 | 7 | 54.76 | 49 | 51.8 |
| 20 | 7.7 | 7.9 | 59.29 | 62.41 | 60.83 |
| 21 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 22 | 7 | 7.6 | 49 | 57.76 | 53.2 |
| 23 | 8 | 8 | 64 | 64 | 64 |
| 24 | 7.7 | 7.5 | 59.29 | 56.25 | 57.75 |
| 25 | 7.8 | 7.8 | 60.84 | 60.84 | 60.84 |
| 26 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 27 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 28 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 29 | 8.5 | 8 | 72.25 | 64 | 68 |
| 30 | 7 | 7.4 | 49 | 54.76 | 51.8 |
| 31 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 32 | 6 | 6.8 | 36 | 46.24 | 40.8 |
| 33 | 7.7 | 8 | 59.29 | 64 | 61.6 |
| 34 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 35 | 7.5 | 7.9 | 56.25 | 62.41 | 59.25 |
| 36 | 6.5 | 6.3 | 42.25 | 39.69 | 40.95 |

| | | | | | |
|---|---|---|---|---|---|
| 37 | 8.5 | 8.6 | 72.25 | 73.96 | 73.1 |
| 38 | 8 | 7.5 | 64 | 56.25 | 60 |
| 39 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 40 | 7.5 | 7.2 | 56.25 | 51.84 | 54 |
| 41 | 8.5 | 8 | 72.25 | 64 | 68 |
| 42 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 43 | 6 | 7 | 36 | 49 | 42 |
| 44 | 7.6 | 8 | 57.76 | 64 | 60.8 |
| 45 | 8 | 7.6 | 64 | 57.76 | 60.8 |
| 46 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 47 | 7.5 | 7.5 | 56.25 | 56.25 | 56.25 |
| 48 | 8 | 8 | 64 | 64 | 64 |
| 49 | 7.8 | 8 | 60.84 | 64 | 62.4 |
| 50 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 51 | 7.5 | 7.8 | 56.25 | 60.84 | 58.5 |
| 52 | 7.5 | 8 | 56.25 | 64 | 60 |
| 53 | 7 | 7.6 | 49 | 57.76 | 53.2 |
| 54 | 7.9 | 8 | 62.41 | 64 | 63.2 |
| 55 | 8 | 8.2 | 64 | 67.24 | 65.6 |
| 56 | 8 | 8.1 | 64 | 65.61 | 64.8 |
| 57 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 58 | 7 | 7.5 | 49 | 56.25 | 52.5 |
| 59 | 7.5 | 7.6 | 56.25 | 57.76 | 57 |
| 60 | 8 | 8 | 64 | 64 | 64 |
| 61 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 62 | 7 | 7.8 | 49 | 60.84 | 54.6 |
| 63 | 7 | 7.5 | 49 | 56.25 | 52.5 |
| 64 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 65 | 7.6 | 8 | 57.76 | 64 | 60.8 |
| 66 | 8 | 8 | 64 | 64 | 64 |
| 67 | 7 | 7.4 | 49 | 54.76 | 51.8 |
| 68 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| **TOTAL** | 517.4 | 523.6 | 3963.12 | 4052.82 | 4002.04 |
| **n =** | 68 | | | | |

$$r = \frac{n\Sigma xy - \Sigma x \cdot \Sigma y}{\sqrt{\left[n\Sigma x^2 - (\Sigma x)^2\right]\left[n\Sigma y^2 - (\Sigma y)^2\right]}} = 0.766$$

TEST OF CORRELATION SIGNIFICANCE:

1. HYPOTHESIS FORMULATION:
   Ho : r = 0 ; there is no correlation between x and y
   Ha : r ≠ 0 ; there is a correlation between x and y

2. 5% significance level, r table = 0.24
   Ho is rejected if |r calculation| > r table

3. CONCLUSION:
   Since |r calculation| = 0.766 > r table , Ho is rejected.
   So there is a significant correlation between x and y.

TABLE

**CALCULATION OF CORELATION**

**( POSTTEST )**

| NO. | R 1 | R2 | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| | X | Y | | | |
| 1 | 8.5 | 8 | 72.25 | 64 | 68 |
| 2 | 7.5 | 7 | 56.25 | 49 | 52.5 |
| 3 | 9 | 9 | 81 | 81 | 81 |
| 4 | 8.3 | 8.5 | 68.89 | 72.25 | 70.55 |
| 5 | 8 | 8.4 | 64 | 70.56 | 67.2 |
| 6 | 7.8 | 7.5 | 60.84 | 56.25 | 58.5 |
| 7 | 7.4 | 7.6 | 54.76 | 57.76 | 56.24 |
| 8 | 7 | 7.2 | 49 | 51.84 | 50.4 |
| 9 | 8.8 | 9.2 | 77.44 | 84.64 | 80.96 |
| 10 | 8.5 | 8.7 | 72.25 | 75.69 | 73.95 |
| 11 | 8.4 | 8 | 70.56 | 64 | 67.2 |
| 12 | 8.5 | 8.9 | 72.25 | 79.21 | 75.65 |
| 13 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| 14 | 8.2 | 8.5 | 67.24 | 72.25 | 69.7 |
| 15 | 8.8 | 9.1 | 77.44 | 82.81 | 80.08 |
| 16 | 9 | 9.3 | 81 | 86.49 | 83.7 |
| 17 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 18 | 9 | 8.6 | 81 | 73.96 | 77.4 |
| 19 | 8 | 8 | 64 | 64 | 64 |
| 20 | 8.3 | 8 | 68.89 | 64 | 66.4 |
| 21 | 8.6 | 9 | 73.96 | 81 | 77.4 |
| 22 | 8 | 8.3 | 64 | 68.89 | 66.4 |
| 23 | 9 | 9.3 | 81 | 86.49 | 83.7 |
| 24 | 8.5 | 8.3 | 72.25 | 68.89 | 70.55 |
| 25 | 8.4 | 8 | 70.56 | 64 | 67.2 |
| 26 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 27 | 9.1 | 8.8 | 82.81 | 77.44 | 80.08 |
| 28 | 8.7 | 8.8 | 75.69 | 77.44 | 76.56 |
| 29 | 8.5 | 8.4 | 72.25 | 70.56 | 71.4 |
| 30 | 7.9 | 8.3 | 62.41 | 68.89 | 65.57 |
| 31 | 8 | 8.1 | 64 | 65.61 | 64.8 |
| 32 | 7.5 | 7.3 | 56.25 | 53.29 | 54.75 |
| 33 | 8.4 | 8.8 | 70.56 | 77.44 | 73.92 |
| 34 | 8.9 | 8.5 | 79.21 | 72.25 | 75.65 |
| 35 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 36 | 7.4 | 7.6 | 54.76 | 57.76 | 56.24 |

| | | | | | |
|---|---|---|---|---|---|
| 37 | 9.1 | 9 | 82.81 | 81 | 81.9 |
| 38 | 8.3 | 8.7 | 68.89 | 75.69 | 72.21 |
| 39 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 40 | 7.9 | 7.8 | 62.41 | 60.84 | 61.62 |
| 41 | 8.5 | 8.6 | 72.25 | 73.96 | 73.1 |
| 42 | 8 | 8.7 | 64 | 75.69 | 69.6 |
| 43 | 7 | 6.9 | 49 | 47.61 | 48.3 |
| 44 | 8.6 | 8.5 | 73.96 | 72.25 | 73.1 |
| 45 | 8 | 8 | 64 | 64 | 64 |
| 46 | 8.8 | 9.1 | 77.44 | 82.81 | 80.08 |
| 47 | 8.3 | 8.7 | 68.89 | 75.69 | 72.21 |
| 48 | 8.5 | 8.3 | 72.25 | 68.89 | 70.55 |
| 49 | 8 | 8.4 | 64 | 70.56 | 67.2 |
| 50 | 8 | 8.5 | 64 | 72.25 | 68 |
| 51 | 8.2 | 8.7 | 67.24 | 75.69 | 71.34 |
| 52 | 8.5 | 9 | 72.25 | 81 | 76.5 |
| 53 | 8.4 | 8.8 | 70.56 | 77.44 | 73.92 |
| 54 | 8.7 | 9.3 | 75.69 | 86.49 | 80.91 |
| 55 | 8.2 | 8 | 67.24 | 64 | 65.6 |
| 56 | 8.4 | 8.6 | 70.56 | 73.96 | 72.24 |
| 57 | 7.9 | 8.1 | 62.41 | 65.61 | 63.99 |
| 58 | 7.5 | 8.3 | 56.25 | 68.89 | 62.25 |
| 59 | 8.1 | 8 | 65.61 | 64 | 64.8 |
| 60 | 8 | 7.8 | 64 | 60.84 | 62.4 |
| 61 | 8.5 | 8.5 | 72.25 | 72.25 | 72.25 |
| 62 | 7.6 | 7.8 | 57.76 | 60.84 | 59.28 |
| 63 | 7.5 | 7.4 | 56.25 | 54.76 | 55.5 |
| 64 | 8 | 7.7 | 64 | 59.29 | 61.6 |
| 65 | 7.9 | 8 | 62.41 | 64 | 63.2 |
| 66 | 7.8 | 8.4 | 60.84 | 70.56 | 65.52 |
| 67 | 7.6 | 7.5 | 57.76 | 56.25 | 57 |
| 68 | 8.4 | 8.6 | 70.56 | 73.96 | 72.24 |
| **TOTAL** | 558 | 563.8 | 4595.52 | 4697.36 | 4642.91 |
| **n =** | 68 | | | | |

$$r = \frac{n\Sigma xy - \Sigma x \cdot \Sigma y}{\sqrt{\left[n\Sigma x^2 - (\Sigma x)^2\right]\left[n\Sigma y^2 - (\Sigma y)^2\right]}} = 0.844$$

TEST OF CORRELATION SIGNIFICANCE:

1. HYPOTHESIS FORMULATION:
   Ho : r = 0 ; there is no correlation between x and y
   Ho : r ≠ 0 ; there is a correlation between x and y

2. 5% significance level, r table = 0.235
   Ho is rejected if |r calculation| > r table

3. CONCLUSION:
   Since |r calculation| = 0.844 > r table , Ho is rejected.
   So there is a significant correlation between x and y.

## CALCULATION FOR PAIR t-TEST
## (KINESTHETIC)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.8 | 7.95 | 0.85 | 0.7225 |
| 2 | 8 | 7.2 | 0.8 | 0.64 |
| 3 | 8.15 | 7.8 | 0.35 | 0.1225 |
| 4 | 8.8 | 8.55 | 0.25 | 0.0625 |
| 5 | 8.15 | 7.3 | 0.85 | 0.7225 |
| 6 | 8.1 | 7.7 | 0.4 | 0.16 |
| 7 | 7.5 | 6.4 | 1.1 | 1.21 |
| 8 | 9.05 | 8.55 | 0.5 | 0.25 |
| 9 | 8.5 | 7.75 | 0.75 | 0.5625 |
| 10 | 7.55 | 7.4 | 0.15 | 0.0225 |
| 11 | 7.85 | 7.35 | 0.5 | 0.25 |
| 12 | 8.55 | 8.25 | 0.3 | 0.09 |
| 13 | 8.35 | 8.1 | 0.25 | 0.0625 |
| 14 | 6.95 | 6.5 | 0.45 | 0.2025 |
| 15 | 8.55 | 7.8 | 0.75 | 0.5625 |
| 16 | 8 | 7.8 | 0.2 | 0.04 |
| 17 | 7.9 | 8 | -0.1 | 0.01 |
| 18 | 8.5 | 8.15 | 0.35 | 0.1225 |
| 19 | 7.7 | 7.4 | 0.3 | 0.09 |
| 20 | 7.45 | 7.25 | 0.2 | 0.04 |
| 21 | 7.85 | 7.25 | 0.6 | 0.36 |
| 22 | 7.95 | 7.8 | 0.15 | 0.0225 |
| 23 | 8.1 | 8 | 0.1 | 0.01 |
| 24 | 7.55 | 7.2 | 0.35 | 0.1225 |
| 25 | 8.5 | 7.4 | 1.1 | 1.21 |
| Total | — | — | 11.5 | 7.67 |
| n | — | — | 25 | — |
| Mean | — | — | 0.46 | — |
| SD | — | — | 0.31490739 | — |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 24
   t(5%) = 1.711

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.46 \qquad n = 25$$

$$s_D = \sqrt{\frac{n(D^2 - (\sum D)^2}{n(n-1)}} = 0.3149$$

$$t_o = \frac{\bar{D}}{S_D/\sqrt{n}} = 7.3037$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.

## CALCULATION FOR PAIR t-TEST

## (VISUAL)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.25 | 7 | 1.25 | 1.5625 |
| 2 | 7.25 | 6.5 | 0.75 | 0.5625 |
| 3 | 9 | 7.9 | 1.1 | 1.21 |
| 4 | 8.4 | 7.25 | 1.15 | 1.3225 |
| 5 | 8.2 | 7.4 | 0.8 | 0.64 |
| 6 | 7.65 | 6.9 | 0.75 | 0.5625 |
| 7 | 7.5 | 6.65 | 0.85 | 0.7225 |
| 8 | 7.1 | 6.7 | 0.4 | 0.16 |
| 9 | 9 | 8.15 | 0.85 | 0.7225 |
| 10 | 9.15 | 8 | 1.15 | 1.3225 |
| 11 | 8.4 | 7.6 | 0.8 | 0.64 |
| 12 | 8.2 | 7.8 | 0.4 | 0.16 |
| 13 | 7.9 | 7.65 | 0.25 | 0.0625 |
| 14 | 8.95 | 8.15 | 0.8 | 0.64 |
| 15 | 8.75 | 8.1 | 0.65 | 0.4225 |
| 16 | 8.45 | 8.25 | 0.2 | 0.04 |
| 17 | 8.1 | 7.2 | 0.9 | 0.81 |
| 18 | 8.95 | 8.15 | 0.8 | 0.64 |
| 19 | 8.5 | 7.5 | 1 | 1 |
| 20 | 8.4 | 8 | 0.4 | 0.16 |
| 21 | 8.2 | 7.9 | 0.3 | 0.09 |
| 22 | 8.25 | 8.1 | 0.15 | 0.0225 |
| 23 | 8.45 | 7.65 | 0.8 | 0.64 |
| 24 | 8.75 | 7.75 | 1 | 1 |
| 25 | 8.6 | 7.3 | 1.3 | 1.69 |
| 26 | 9 | 7.95 | 1.05 | 1.1025 |
| **Total** | --- | --- | **19.85** | **17.9075** |
| **n** | --- | --- | **26** | --- |
| **Mean** | --- | --- | **0.76346154** | --- |
| **SD** | --- | --- | **0.33183059** | --- |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 25
   t(5%) = 1.708

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.7635 \qquad n = 26$$

$$s_D = \sqrt{\frac{n(D^2 - (\sum D)^2}{n(n-1)}} = 0.3318$$

$$t_o = \frac{\bar{D}}{S_D / \sqrt{n}} = 11.732$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.

## CALCULATION FOR PAIR t-TEST
## (AUDITORY)

| No | Test | | Different | |
|---|---|---|---|---|
| | Post | Pree | D | $D^2B$ |
| 1 | 8.6 | 8.1 | 0.5 | 0.25 |
| 2 | 8.2 | 7.75 | 0.45 | 0.2025 |
| 3 | 8.7 | 8.35 | 0.35 | 0.1225 |
| 4 | 7.4 | 6.75 | 0.65 | 0.4225 |
| 5 | 8.35 | 7.55 | 0.8 | 0.64 |
| 6 | 8.95 | 7.65 | 1.3 | 1.69 |
| 7 | 9.15 | 9.25 | -0.1 | 0.01 |
| 8 | 8.55 | 8.5 | 0.05 | 0.0025 |
| 9 | 8.05 | 7.55 | 0.5 | 0.25 |
| 10 | 7.4 | 6.4 | 1 | 1 |
| 11 | 8.6 | 7.85 | 0.75 | 0.5625 |
| 12 | 8.7 | 8.1 | 0.6 | 0.36 |
| 13 | 8.1 | 8.1 | 0 | 0 |
| 14 | 8.5 | 8.05 | 0.45 | 0.2025 |
| 15 | 8 | 7.4 | 0.6 | 0.36 |
| 16 | 7.9 | 7.25 | 0.65 | 0.4225 |
| 17 | 8.05 | 7.55 | 0.5 | 0.25 |
| **Total** | — | — | **9.05** | **6.7475** |
| **n** | — | — | **17** | — |
| **Mean** | — | — | **0.53235294** | — |
| **SD** | — | — | **0.34728463** | — |

TEST OF HYPOTHESES:

1. Ho : $\mu D = 0$, there is no significant difference between score of preetest and posttest.
   Ha: $\mu D > 0$, terjadi peningkatan scoe yang signifikan

2. t-test, where df = n - 1 = 16
   t(5%) = 1.746

3. Calculation for t observation (to) :

$$\bar{D} = \frac{\sum D}{n} = 0.5324 \qquad n = 17$$

$$s_D = \sqrt{\frac{n\,(D^2 - (\sum D)^2}{n(n-1)}} = 0.3473$$

$$t_o = \frac{\bar{D}}{S_D / \sqrt{n}} = 6.3203$$

4. Conclusion:
   Because t observation more than t table thus Ho is rejected. Hence we conclude that the posttest score is geater than preetest score.