

## CHAPTER IV

### RESEARCH FINDING AND DISCUSSION

This chapter presented of two items, the findings of research and the discussion of the research. In findings item, the researcher showed all of the data which were collected during in the research. While in the discussion item, the researcher analysed all the data in finding item.

#### 4.1 Research Finding

The findings of this research deals with calculation of trying out of instrument, the analysis of data and the hypothesis testing. The finding was described as follows:

##### 4.1.1 Try-out Analysis

The try-out was meant to examine the validity and the reliability of the instrument before it was used as the pre-test and post-test. This test was conducted on January 9, 2019. Try-out test was conducted for X-IS 4 class. There were thirty nine students as a respondent. The try-out test is available in Appendix 2.

##### 4.1.1.1 Validity

This research aimed to measure the instrument to be valid or not in enhancing the students' reading comprehension. The item test

is valid if  $r_{xy}$  are greater than  $r_{table}$  or  $r_{xy} > r_{table}$ . The writer consulted the table of  $r$  with  $df = n-2$ ,  $df = 39 - 2 = 37$  and significant level 0,05 was 0,316.

To calculate the validity of trying out instrument used manual calculation as follows:

**Table. 4.1**

**The Calculation of Validity Instrument**

No. Item	The Score of $r_{xy}$	Valid/Invalid
1	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 710) - (29 \times 903)}{\sqrt{\{(39 \times 29) - 841\} \{(39 \times 22,283) - 815,409\}}}$ $= \frac{27,690 - 26,187}{\sqrt{(1,131 - 841)(869,037 - 815,409)}}$ $= \frac{1,503}{\sqrt{(290)(53,628)}} = \frac{1,503}{\sqrt{15,552,120}} = \frac{1,503}{3,943}$ $r_{xy} = 0,381 = 0,381 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 1 is valid because the <math>r_{xy} = 0,381</math> is greater than <math>r_{table} = 0,316</math>)</p>
2	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$	<p><b>Valid</b></p> <p>(The result of</p>

	$r_{xy} = \frac{(39 \times 619) - (25 \times 903)}{\sqrt{\{(39 \times 25) - 625\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,141 - 22,575}{\sqrt{(975 - 625)(869,037 - 815,409)}}$ $= \frac{1,566}{\sqrt{(350)(53,628)}} = \frac{1,566}{\sqrt{18,769,800}} = \frac{1,566}{4,332}$ $r_{xy} = 0,361 = 0,361 \geq 0,316$	<p>item 2 is valid</p> <p>because the</p> <p><math>r_{xy} = 0,361</math> is</p> <p>greater than</p> <p><math>r_{table} = 0,316</math>)</p>
3	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 710) - (29 \times 903)}{\sqrt{\{(39 \times 29) - 841\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{27,690 - 26,187}{\sqrt{(1,131 - 841)(869,037 - 815,409)}}$ $= \frac{1,503}{\sqrt{(290)(53,628)}} = \frac{1,503}{\sqrt{15,552,120}} = \frac{1,503}{3,943}$ $r_{xy} = 0,381 = 0,381 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of</p> <p>item 3 is valid</p> <p>because the</p> <p><math>r_{xy} = 0,381</math> is</p> <p>greater than</p> <p><math>r_{table} = 0,316</math>)</p>

4	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 638) - (26 \times 903)}{\sqrt{\{(39 \times 26) - 676\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,882 - 23,478}{\sqrt{(1,014 - 676)(869,037 - 815,409)}}$ $= \frac{1,404}{\sqrt{(338)(53,628)}} = \frac{1,404}{\sqrt{18,126,264}} = \frac{1,404}{4,257}$ $r_{xy} = 0,329 = 0,329 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 4 is valid because the <math>r_{xy} = 0,329</math> is greater than <math>r_{table} = 0,316</math>)</p>
5	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 482) - (20 \times 903)}{\sqrt{\{(39 \times 20) - 400\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{18,798 - 18,060}{\sqrt{(780 - 400)(869,037 - 815,409)}}$ $= \frac{738}{\sqrt{(380)(53,628)}} = \frac{738}{\sqrt{20,378,640}} = \frac{738}{4,514}$ $r_{xy} = 0,163 = 0,163 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 5 is invalid because the <math>r_{xy} = 0,163</math> is less than <math>r_{table} = 0,316</math>)</p>
6	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 441) - (17 \times 903)}{\sqrt{\{(39 \times 17) - 289\}\{(39 \times 22,283) - 815,409\}}}$	<p><b>Valid</b></p> <p>(The result of item 6 is valid because the</p>

	$= \frac{17,199 - 15,351}{\sqrt{(663 - 289)(869,037 - 815,409)}}$ $= \frac{1,848}{\sqrt{(374)(53,628)}} = \frac{1,848}{\sqrt{20,056,872}} = \frac{1,848}{4,478}$ $r_{xy} = 0,412 = 0,412 \geq 0,316$	<p><math>r_{xy} = 0,412</math> is greater than <math>r_{table} = 0,316</math>)</p>
7	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 554) - (22 \times 903)}{\sqrt{\{(39 \times 22) - 484\} \{(39 \times 22,283) - 815,409\}}}$ $= \frac{21,606 - 19,866}{\sqrt{(858 - 484)(869,037 - 815,409)}}$ $= \frac{1,740}{\sqrt{(374)(53,628)}} = \frac{1,740}{\sqrt{20,056,872}} = \frac{1,740}{4,478}$ $r_{xy} = 0,388 = 0,388 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 7 is valid because the <math>r_{xy} = 0,388</math> is greater than <math>r_{table} = 0,316</math>)</p>
8	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 509) - (21 \times 903)}{\sqrt{\{(39 \times 21) - 441\} \{(39 \times 22,283) - 815,409\}}}$ $= \frac{19,851 - 18,963}{\sqrt{(819 - 441)(869,037 - 815,409)}}$ $= \frac{888}{\sqrt{(378)(53,628)}} = \frac{888}{\sqrt{20,271,384}} = \frac{888}{4,502}$ $r_{xy} = 0,197 = 0,197 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 8 is invalid because the <math>r_{xy} = 0,197</math> is less than <math>r_{table} = 0,316</math>)</p>

<p><b>9</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 783) - (32 \times 903)}{\sqrt{\{(39 \times 32) - 1024\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{30,537 - 28,896}{\sqrt{(1,248 - 1024)(869,037 - 815,409)}}$ $= \frac{1,641}{\sqrt{(224)(53,628)}} = \frac{1,641}{\sqrt{12,012,672}} = \frac{1,641}{3,465}$ $r_{xy} = 0,473 = 0,473 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 9 is valid because the <math>r_{xy} = 0,473</math> is greater than <math>r_{table} = 0,316</math>)</p>
<p><b>10</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 474) - (19 \times 903)}{\sqrt{\{(39 \times 19) - 361\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{18,486 - 17,157}{\sqrt{(741 - 361)(869,037 - 815,409)}}$ $= \frac{1,329}{\sqrt{(380)(53,628)}} = \frac{1,329}{\sqrt{20,378,640}} = \frac{1,329}{4,514}$ $r_{xy} = 0,294 = 0,294 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 10 is invalid because the <math>r_{xy} = 0,294</math> is less than <math>r_{table} = 0,316</math>)</p>

<p><b>11</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 585) - (23 \times 903)}{\sqrt{\{(39 \times 23) - 529\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{22,815 - 20,769}{\sqrt{(879 - 529)(869,037 - 815,409)}}$ $= \frac{2,046}{\sqrt{(350)(53,628)}} = \frac{2,046}{\sqrt{18,769,800}} = \frac{2,046}{4,332}$ $r_{xy} = 0,472 = 0,472 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 11 is valid because the <math>r_{xy} = 0,472</math> is greater than <math>r_{table} = 0,316</math>)</p>
<p><b>12</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 641) - (26 \times 903)}{\sqrt{\{(39 \times 26) - 676\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,999 - 23,478}{\sqrt{(1,014 - 676)(869,037 - 815,409)}}$ $= \frac{1,521}{\sqrt{(338)(53,628)}} = \frac{1,521}{\sqrt{18,126,264}} = \frac{1,521}{4,257}$ $r_{xy} = 0,357 = 0,357 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 12 is valid because the <math>r_{xy} = 0,357</math> is greater than <math>r_{table} = 0,316</math>)</p>

<p><b>13</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 619) - (25 \times 903)}{\sqrt{\{(39 \times 25) - 625\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,141 - 22,575}{\sqrt{(975 - 625)(869,037 - 815,409)}}$ $= \frac{1,566}{\sqrt{(350)(53,628)}} = \frac{1,566}{\sqrt{18,769,800}} = \frac{1,566}{4,332}$ $r_{xy} = 0,361 = 0,361 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 13 is valid because the <math>r_{xy} = 0,361</math> is greater than <math>r_{table} = 0,316</math>)</p>
<p><b>14</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 549) - (22 \times 903)}{\sqrt{\{(39 \times 22) - 484\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{21,411 - 19,866}{\sqrt{(858 - 484)(869,037 - 815,409)}}$ $= \frac{1,545}{\sqrt{(374)(53,628)}} = \frac{1,545}{\sqrt{20,056,872}} = \frac{1,545}{4,478}$ $r_{xy} = 0,345 = 0,345 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 14 is valid because the <math>r_{xy} = 0,345</math> is greater than <math>r_{table} = 0,316</math>)</p>



<p><b>15</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 665) - (27 \times 903)}{\sqrt{\{(39 \times 27) - 729\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{25,935 - 24,381}{\sqrt{(1053 - 729)(869,037 - 815,409)}}$ $= \frac{1,554}{\sqrt{(324)(53,628)}} = \frac{1,554}{\sqrt{17,375,472}} = \frac{1,554}{4,168}$ $r_{xy} = 0,372 = 0,372 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 15 is valid because the <math>r_{xy} = 0,372</math> is greater than <math>r_{table} = 0,316</math>)</p>
<p><b>16</b></p>	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 435) - (18 \times 903)}{\sqrt{\{(39 \times 18) - 324\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{16,965 - 16,254}{\sqrt{(702 - 324)(869,037 - 815,409)}}$ $= \frac{711}{\sqrt{(378)(53,628)}} = \frac{711}{\sqrt{20,271,384}} = \frac{711}{4,502}$ $r_{xy} = 0,157 = 0,157 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 16 is invalid because the <math>r_{xy} = 0,157</math> is less than <math>r_{table} = 0,316</math>)</p>

<p><b>17</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 322) - (13 \times 903)}{\sqrt{\{(39 \times 13) - 169\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{12,558 - 11,739}{\sqrt{(507 - 169)(869,037 - 815,409)}}$ $= \frac{819}{\sqrt{(338)(53,628)}} = \frac{819}{\sqrt{18,126,264}} = \frac{819}{4,257}$ $r_{xy} = 0,192 = 0,192 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 17 is invalid because the <math>r_{xy} = 0,192</math> is less than <math>r_{table} = 0,316</math>)</p>
<p><b>18</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 392) - (16 \times 903)}{\sqrt{\{(39 \times 16) - 256\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{15,288 - 14,448}{\sqrt{(624 - 256)(869,037 - 815,409)}}$ $= \frac{840}{\sqrt{(368)(53,628)}} = \frac{840}{\sqrt{19,735,104}} = \frac{840}{4,442}$ $r_{xy} = 0,189 = 0,189 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 18 is invalid because the <math>r_{xy} = 0,189</math> is less than <math>r_{table} = 0,316</math>)</p>
<p><b>19</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 648) - (26 \times 903)}{\sqrt{\{(39 \times 26) - 676\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{25,272 - 23,478}{\sqrt{(1,014 - 676)(869,037 - 815,409)}}$	<p><b>Valid</b></p> <p>(The result of item 19 is valid because the <math>r_{xy} = 0,421</math> is</p>

	$= \frac{1,794}{\sqrt{(338)(53,628)}} = \frac{1,794}{\sqrt{18,126,264}} = \frac{1,794}{4,257}$ $r_{xy} = 0,421 = 0,421 \geq 0,316$	<p>greater than</p> <p><math>r_{table} = 0,316</math>)</p>
20	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 569) - (23 \times 903)}{\sqrt{\{(39 \times 23) - 529\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{22,191 - 20,769}{\sqrt{(879 - 529)(869,037 - 815,409)}}$ $= \frac{1,422}{\sqrt{(350)(53,628)}} = \frac{1,422}{\sqrt{18,769,800}} = \frac{1,422}{4,332}$ $r_{xy} = 0,328 = 0,328 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 20 is valid because the <math>r_{xy} = 0,328</math> is greater than <math>r_{table} = 0,316</math>)</p>
21	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 757) - (32 \times 903)}{\sqrt{\{(39 \times 32) - 1024\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{29,523 - 28,896}{\sqrt{(1,248 - 1024)(869,037 - 815,409)}}$ $= \frac{627}{\sqrt{(224)(53,628)}} = \frac{627}{\sqrt{12,012,672}} = \frac{627}{3,465}$ $r_{xy} = 0,180 = 0,180 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 21 is invalid because the <math>r_{xy} = 0,180</math> is less than <math>r_{table} = 0,316</math>)</p>
22	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$	<p><b>Valid</b></p> <p>(The result of item 22 is valid)</p>

	$r_{xy} = \frac{(39 \times 466) - (18 \times 903)}{\sqrt{\{(39 \times 18) - 324\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{18,174 - 16,254}{\sqrt{(702 - 324)(869,037 - 815,409)}}$ $= \frac{1920}{\sqrt{(378)(53,628)}} = \frac{1920}{\sqrt{20,271,384}} = \frac{1920}{4,502}$ $r_{xy} = 0,426 = 0,426 \geq 0,316$	<p>because the <math>r_{xy} = 0,426</math> is greater than <math>r_{table} = 0,316</math>)</p>
23	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 566) - (23 \times 903)}{\sqrt{\{(39 \times 23) - 529\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{22,074 - 20,769}{\sqrt{(879 - 529)(869,037 - 815,409)}}$ $= \frac{1,305}{\sqrt{(350)(53,628)}} = \frac{1,305}{\sqrt{18,769,800}} = \frac{1,305}{4,332}$ $r_{xy} = 0,301 = 0,301 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 23 is invalid because the <math>r_{xy} = 0,301</math> is less than <math>r_{table} = 0,316</math>)</p>

24	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 484) - (19 \times 903)}{\sqrt{\{(39 \times 19) - 361\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{18,876 - 17,157}{\sqrt{(741 - 361)(869,037 - 815,409)}}$ $= \frac{1,719}{\sqrt{(380)(53,628)}} = \frac{1,719}{\sqrt{20,378,640}} = \frac{1,719}{4,514}$ $r_{xy} = 0,380 = 0,380 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 24 is valid because the <math>r_{xy} = 0,380</math> is greater than <math>r_{table} = 0,316</math>)</p>
25	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 736) - (30 \times 903)}{\sqrt{\{(39 \times 30) - 900\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{28,704 - 27,090}{\sqrt{(1170 - 900)(869,037 - 815,409)}}$ $= \frac{1,614}{\sqrt{(270)(53,628)}} = \frac{1,614}{\sqrt{14,479,560}} = \frac{1,614}{3,805}$ $r_{xy} = 0,424 = 0,424 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 25 is valid because the <math>r_{xy} = 0,424</math> is greater than <math>r_{table} = 0,316</math>)</p>

26	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 708) - (29 \times 903)}{\sqrt{\{(39 \times 29) - 841\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{27,612 - 26,187}{\sqrt{(1,131 - 841)(869,037 - 815,409)}}$ $= \frac{1,425}{\sqrt{(290)(53,628)}} = \frac{1,425}{\sqrt{15,552,120}} = \frac{1,425}{3,943}$ $r_{xy} = 0,361 = 0,361 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 26 is valid because the <math>r_{xy} = 0,361</math> is greater than <math>r_{table} = 0,316</math>)</p>
27	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 365) - (15 \times 903)}{\sqrt{\{(39 \times 15) - 225\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{14,235 - 13,545}{\sqrt{(585 - 225)(869,037 - 815,409)}}$ $= \frac{690}{\sqrt{(360)(53,628)}} = \frac{690}{\sqrt{19,306,080}} = \frac{690}{4,393}$ $r_{xy} = 0,157 = 0,157 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 27 is invalid because the <math>r_{xy} = 0,157</math> is less than <math>r_{table} = 0,316</math>)</p>
28	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 592) - (24 \times 903)}{\sqrt{\{(39 \times 24) - 576\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{23,088 - 21,672}{\sqrt{(936 - 576)(869,037 - 815,409)}}$	<p><b>Valid</b></p> <p>(The result of item 28 is valid because the <math>r_{xy} = 0,322</math> is</p>

	$= \frac{1,416}{\sqrt{(360)(53,628)}} = \frac{1,416}{\sqrt{19,306,080}} = \frac{1,416}{4,393}$ $r_{xy} = 0,322 = 0,322 \geq 0,316$	greater than $r_{table} = 0,316)$
29	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 356) - (14 \times 903)}{\sqrt{\{(39 \times 14) - 196\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{13,884 - 12,642}{\sqrt{(546 - 196)(869,037 - 815,409)}}$ $= \frac{1242}{\sqrt{(350)(53,628)}} = \frac{1242}{\sqrt{18,769,800}} = \frac{1242}{4,332}$ $r_{xy} = 0,286 = 0,286 \leq 0,316$	<b>Invalid</b>  (The result of item 29 is invalid because the $r_{xy} = 0,286$ is less than $r_{table} = 0,316)$
30	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 409) - (17 \times 903)}{\sqrt{\{(39 \times 17) - 289\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{15,951 - 15,351}{\sqrt{(663 - 289)(869,037 - 815,409)}}$ $= \frac{600}{\sqrt{(374)(53,628)}} = \frac{600}{\sqrt{20,056,872}} = \frac{600}{4,478}$ $r_{xy} = 0,133 = 0,133 \geq 0,316$	<b>Invalid</b>  (The result of item 30 is invalid because the $r_{xy} = 0,133$ is less than $r_{table} = 0,316)$

31	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 685) - (28 \times 903)}{\sqrt{\{(39 \times 28) - 784\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{26,715 - 25,284}{\sqrt{(1092 - 784)(869,037 - 815,409)}}$ $= \frac{1431}{\sqrt{(308)(53,628)}} = \frac{1431}{\sqrt{16,517,424}} = \frac{1431}{4,064}$ $r_{xy} = 0,352 = 0,352 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 31 is valid because the <math>r_{xy} = 0,352</math> is greater than <math>r_{table} = 0,316</math>)</p>
32	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 687) - (28 \times 903)}{\sqrt{\{(39 \times 28) - 784\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{26,793 - 25,284}{\sqrt{(1092 - 784)(869,037 - 815,409)}}$ $= \frac{1509}{\sqrt{(308)(53,628)}} = \frac{1509}{\sqrt{16,517,424}} = \frac{1509}{4,064}$ $r_{xy} = 0,371 = 0,371 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 32 is valid because the <math>r_{xy} = 0,371</math> is greater than <math>r_{table} = 0,316</math>)</p>
33	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 388) - (16 \times 903)}{\sqrt{\{(39 \times 16) - 256\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{15,132 - 14,448}{\sqrt{(624 - 256)(869,037 - 815,409)}}$	<p><b>Invalid</b></p> <p>(The result of item 33 is invalid because the <math>r_{xy} = 0,153</math> is</p>



	$= \frac{684}{\sqrt{(368)(53,628)}} = \frac{684}{\sqrt{19,735,104}} = \frac{684}{4,442}$ $r_{xy} = 0153 = 0,153 \leq 0,316$	less than $r_{table} = 0,316$
34	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 624) - (25 \times 903)}{\sqrt{\{(39 \times 25) - 625\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,336 - 22,575}{\sqrt{(975 - 625)(869,037 - 815,409)}}$ $= \frac{1,761}{\sqrt{(350)(53,628)}} = \frac{1,761}{\sqrt{18,769,800}} = \frac{1,761}{4,332}$ $r_{xy} = 0,406 = 0,406 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 34 is valid because the <math>r_{xy} = 0,406</math> is greater than <math>r_{table} = 0,316</math>)</p>
35	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 673) - (27 \times 903)}{\sqrt{\{(39 \times 27) - 729\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{26,247 - 24,381}{\sqrt{(1053 - 729)(869,037 - 815,409)}}$ $= \frac{1,866}{\sqrt{(324)(53,628)}} = \frac{1,866}{\sqrt{17,375,472}} = \frac{1,866}{4,168}$ $r_{xy} = 0,447 = 0,447 \geq 0,316$	<p><b>Valid</b></p> <p>(The result of item 35 is valid because the <math>r_{xy} = 0,447</math> is greater than <math>r_{table} = 0,316</math>)</p>

<p><b>36</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 369) - (15 \times 903)}{\sqrt{\{(39 \times 15) - 225\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{14,391 - 13,545}{\sqrt{(585 - 225)(869,037 - 815,409)}}$ $= \frac{846}{\sqrt{(360)(53,628)}} = \frac{846}{\sqrt{19,306,080}} = \frac{846}{4,393}$ $r_{xy} = 0,192 = 0,192 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 36 is invalid because the <math>r_{xy} = 0,192</math> is less than <math>r_{table} = 0,316</math>)</p>
<p><b>37</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 391) - (16 \times 903)}{\sqrt{\{(39 \times 16) - 256\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{15,249 - 14,448}{\sqrt{(624 - 256)(869,037 - 815,409)}}$ $= \frac{801}{\sqrt{(368)(53,628)}} = \frac{801}{\sqrt{19,735,104}} = \frac{801}{4,442}$ $r_{xy} = 0,180 = 0,180 \leq 0,316$	<p><b>Invalid</b></p> <p>(The result of item 37 is invalid because the <math>r_{xy} = 0,180</math> is less than <math>r_{table} = 0,316</math>)</p>
<p><b>38</b></p>	$\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\}\{N \sum Y^2 - (\sum Y)^2\}}}$ $r_{xy} = \frac{(39 \times 643) - (26 \times 903)}{\sqrt{\{(39 \times 26) - 676\}\{(39 \times 22,283) - 815,409\}}}$ $= \frac{25,077 - 23,478}{\sqrt{(1,014 - 676)(869,037 - 815,409)}}$	<p><b>Valid</b></p> <p>(The result of item 38 is valid because the <math>r_{xy} = 0,375</math> is</p>

	$= \frac{1,599}{\sqrt{(338)(53,628)}} = \frac{1,599}{\sqrt{18,126,264}} = \frac{1,599}{4,257}$ $r_{xy} = 0,375 = 0,375 \geq 0,316$	greater than $r_{table} = 0,316$
39	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 411) - (17 \times 903)}{\sqrt{\{(39 \times 17) - 289\} \{(39 \times 22,283) - 815,409\}}}$ $= \frac{16,029 - 15,351}{\sqrt{(663 - 289)(869,037 - 815,409)}}$ $= \frac{678}{\sqrt{(374)(53,628)}} = \frac{678}{\sqrt{20,056,872}} = \frac{678}{4,478}$ $r_{xy} = 0,151 = 0,151 \geq 0,316$	<b>Invalid</b>  (The result of item 39 is invalid because the $r_{xy} = 0,151$ is less than $r_{table} = 0,316$ )
40	$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$ $= \frac{(39 \times 628) - (25 \times 903)}{\sqrt{\{(39 \times 25) - 625\} \{(39 \times 22,283) - 815,409\}}}$ $= \frac{24,492 - 22,575}{\sqrt{(975 - 625)(869,037 - 815,409)}}$ $= \frac{1,917}{\sqrt{(350)(53,628)}} = \frac{1,917}{\sqrt{18,769,800}} = \frac{1,917}{4,332}$ $r_{xy} = 0,442 = 0,442 \geq 0,316$	<b>Valid</b>  (The result of item 40 is valid because the $r_{xy} = 0,442$ is greater than $r_{table} = 0,316$ )

Based on the computation above, from 40 item questions to be tested, it showed there were 25 questions that valid and there were 15 questions that invalid.

The researcher determined the valid questions and invalid question as the following table below:

**Table 4.2**  
**Calculation Valid Question and Invalid Question**

<b>Valid</b>	<b>Invalid</b>
1,2,3,4,6,7,9,11,12,13,14,15,19, 20,,22,24,25, 26,28,31,32,34,35, 38, 40	5,8,10,16,17,18,21,23,27,2 9,30,33,36, 37,39
<b>Sum: 25</b>	<b>Sum: 15</b>

Based on the table above, the 25 items which were valid was used for pre-test and post-test questions. And for the 15 invalid items, were not used for the test.

#### **4.1.1.2 Reliability**

After measuring the validity, the writer calculated the reliability. This research was aimed to know the instrument

was reliable or not. The writer calculated the reliability by determining the odd and even of the questions number. The item test is reliable when  $r_{11} > r_{table}$ .

To calculate reliability of trying out instrument used manual calculation as follows:

**Table. 4.3**

**The Calculation of Reliability Instrument**

The Score of $r_{11}$	Reliable / Not Reliable
$r_{11} = \frac{2 r_{1/21/2}}{1 + r_{1/21/2}}$ $= \frac{2 \cdot (1.852)}{1 + (1.852)}$ $= \frac{3.704}{2.852}$ $= 1.298$ $= 1.298 > 0,7$	<p><b>Reliable</b></p>

Based on the calculation above, it was found  $r_{11}$  was 1.298 and  $r_{table}$  0,7 as argued by (Widoyoko, 2016:261) cites in Lin (1989) and Kaplan (1982). Clearly, it can be seen that  $r_{11}$  was greater than  $r_{table}$  or  $1.298 > 0.7$ . It means that the

instrument of trying out test was reliable and could be tested repeatedly.

#### **4.1.2 Data Analysis**

This purpose of this research is to know the effectiveness of group investigation technique to enhance the students' reading comprehension at the tenth grade students of MA Hasyim Asy'ari Bangsri Jepara in the academic year of 2018/2019. The writer collected the data from students' pre-test and post-test score. The data was described into two points as the data. They were the pre-test and post-test score. Both of pre-test were consist of 25 questions in multiple choices. All of the questions were about recount text.

##### **a. The Result of Pre-test**

The writer conducted pre-test in the first meeting. The pretest was given to experimental and control group. It was given on 10<sup>th</sup> of January 2019, but in different time. The purpose of pretest is to know the students' understanding about recount text. After the pretest, the writer implemented the treatment for two meetings, and in the last meeting, the writer conducted pretest in both of group, experimental and control group.

The following table shows the score of pre-test in the experimental and control group.

**Table 4.4****The Pre-test Score of Experimental and Control Group**

No	Code	Pre-test Result	No	Code	Pre-test Result
1	E-01	56	1	C-01	40
2	E-02	60	2	C-02	36
3	E-03	56	3	C-03	48
4	E-04	64	4	C-04	52
5	E-05	60	5	C-05	56
6	E-06	68	6	C-06	36
7	E-07	56	7	C-07	40
8	E-08	52	8	C-08	44
9	E-09	48	9	C-09	52
10	E-10	60	10	C-10	44
11	E-11	60	11	C-11	36
12	E-12	60	12	C-12	44
13	E-13	60	13	C-13	52
14	E-14	48	14	C-14	32
15	E-15	52	15	C-15	48
16	E-16	68	16	C-16	52
17	E-17	64	17	C-17	36
18	E-18	56	18	C-18	60
19	E-19	52	19	C-19	40
20	E-20	60	20	C-20	32
21	E-21	56	21	C-21	56
22	E-22	64	22	C-22	40

23	E-23	56	23	C-23	40
24	E-24	60	24	C-24	40
25	E-25	60	25	C-25	52
26	E-26	52	26	C-26	36
27	E-27	48	27	C-27	40
28	E-28	60	28	C-28	40
29	E-29	56	29	C-29	40
30	E-30	48	30	C-30	48
31	E-31	56	31	C-31	40
32	E-32	60	32	C-32	60
33	E-33	56	33	C-33	60
34	E-34	68	34	C-34	44
35	E-35	56	35	C-35	44
36	E-36	60	36	C-36	64
37	E-37	56	37	C-37	44
38	E-38	52	38	C-38	48
39	E-39	56	39	C-39	32
			40	C-40	36
			41	C-41	44
	$\Sigma$	<b>2240</b>		$\Sigma$	<b>1828</b>
	<b>MEAN</b>	<b>57,44</b>		<b>MEAN</b>	<b>44,59</b>

Based on the table above, the mean score of pre-test in experimental group was 57,44, while the mean score of pre-test in control group was 44,59. It can be seen that the mean scores of



experimental group and control group were different. It can be concluded that the result of pre-test experimental group was higher than the control group.

The writer analyzed the data using t-test Formula in SPSS Statistic. This technique was useful to prove statistically whether there was any significant different between students' reading comprehension in both experimental and control group.

**Table 4.5**

**The T-test Result of Pre-test Score Both Experimental and Control Group**

<b>Group Statistics</b>					
	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
<b>PretestScore</b>	<b>Group 1</b>	<b>39</b>	<b>57.44</b>	<b>5.310</b>	<b>.850</b>
	<b>Group 2</b>	<b>41</b>	<b>44.59</b>	<b>8.370</b>	<b>1.307</b>

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest Score	Equal variances assumed	8.031	.006	8.153	78	.000	12.851	1.576	9.712	15.989
	Equal variances not assumed			8.241	68.169	.000	12.851	1.559	9.739	15.962

Table above described the t-test analysis of pre-test in experimental and control group. There were two tables, first table was named "Group Statistic" presented the statistical results of pre-test in the experimental and control group. The group statistic show that the average between experimental and control group were different. The mean score of pre-test in experimental group was 57,40, while the mean score of pre-test in control group was 44,50. It can be seen that the mean scores of experimental group and control group had the different understanding about recount text.

The second table was named “Independent Samples Test”, it described the statistical of this research. The analysis showed that the difference significant was 0,00. It meant there was significant the pre-test score of experimental group and control group. The significant level of  $0,00 < 0,05$ . It indicates that the pre-test of experimental and control group was significant in enhancing the students’ reading comprehension.

In the independent sample test table also described about the value of this research. The result of t-value in this research was 8.153. Furthermore, the t-value was compared to the t-table to know whether through Group Investigation Technique the students can enhance their reading comprehension or not. The t-table was taken from the requirement of t-table to analyse the data. The t-table of 0,05 as the significant level was 2,000 with 78 the degree of freedom(df). Then, it can be stated that t-value (8,153) of pre-test  $>$  t-table (2,000). It can be concluded that Group Inverigation Technique can enhance the students’ reading comprehension at the tenth grades of MA Hasyim Asy’ari Bangsri Jepara in the academic year of 2018/2019.

**b. The Result of Post-test**

The post-test was given to experimental and control group after presenting the material about recount text. It was given on 30<sup>th</sup> of January 2019, but in different time.

The following table shows the score of post-test in experimental and control group.

**Table 4.6**  
**The Post-Test Score of Experimental and Control Group**

No	Code	Post-test Result	No	Code	Post-test Result
1	E-01	76	1	C-01	60
2	E-02	76	2	C-02	52
3	E-03	80	3	C-03	60
4	E-04	76	4	C-04	68
5	E-05	68	5	C-05	60
6	E-06	80	6	C-06	52
7	E-07	80	7	C-07	52
8	E-08	76	8	C-08	56
9	E-09	72	9	C-09	60
10	E-10	76	10	C-10	64
11	E-11	76	11	C-11	48
12	E-12	80	12	C-12	56
13	E-13	72	13	C-13	68
14	E-14	80	14	C-14	56
15	E-15	76	15	C-15	56
16	E-16	88	16	C-16	68

17	E-17	84	17	C-17	52
18	E-18	76	18	C-18	64
19	E-19	64	19	C-19	60
20	E-20	80	20	C-20	52
21	E-21	80	21	C-21	60
22	E-22	84	22	C-22	52
23	E-23	72	23	C-23	56
24	E-24	80	24	C-24	64
25	E-25	76	25	C-25	68
26	E-26	72	26	C-26	60
27	E-27	76	27	C-27	56
28	E-28	72	28	C-28	56
29	E-29	76	29	C-29	72
30	E-30	80	30	C-30	60
31	E-31	76	31	C-31	60
32	E-32	84	32	C-32	64
33	E-33	80	33	C-33	68
34	E-34	80	34	C-34	60
35	E-35	88	35	C-35	68
36	E-36	88	36	C-36	72
37	E-37	76	37	C-37	60
38	E-38	80	38	C-38	64
39	E-39	76	39	C-39	64
			40	C-40	62
			41	C-41	64
	$\Sigma$	<b>3032</b>		$\Sigma$	<b>2474</b>
	<b>MEAN</b>	<b>77,74</b>		<b>MEAN</b>	<b>60,34</b>

Based on the table above, the mean score of post test in experimental and control group was 77,74, and the mean score of post-test in control group was 60,34. It can be seen that the mean scores of experimental group and control group were different too. It can be concluded that the result of post-test experimental group was higher than the control group.

The writer analyzed the data using t-test Formula in SPSS Statistic. This technique was useful to prove statistically whether there was any significant different between students' reading comprehension in both experimental and control group.

**Table 4.7**

**The T-test Result of Post-test Score Both Experimental and Control Group**

<b>Group Statistics</b>					
	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
<b>Posttest Score</b>	<b>Group 1</b>	<b>39</b>	<b>77.74</b>	<b>5.092</b>	<b>.815</b>
	<b>Group 2</b>	<b>41</b>	<b>60.34</b>	<b>5.965</b>	<b>.932</b>

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Posttest Score	Equal variances assumed	1.057	.307	14.000	78	.000	17.402	1.243	14.928	19.877
	Equal variances not assumed			14.056	77.121	.000	17.402	1.238	14.937	19.867

Table above described the t-test analysis of post-test in experimental and control group. There were two tables, first table was named "Group Statistic" presented the statistical results of post-test in the experimental and control group. The group statistic showed that the average between experimental and control group were different.

The mean score of post-test in experimental group was 77,74, while the mean score of post-test in control group was 60,34. It can be seen that the mean scores of experimental group and control group had the different understanding about recount text.

The second table was named “Independent Samples Test”, it described the statistical of this research. The analysis showed that the difference significant was 0,00. It meant there was significant the post-test score of experimental group and control group. The significant level of  $0,00 < 0,05$ . It indicates that the post-test of experimental and control group was significant in enhancing the students’ reading comprehension.

In the independent sample test table also described about the value of this research. The result of t-value in this research was 14.000. Furthermore, the t-value was compared to the t-table to know whether through Group Investigation Technique the students can enhance their reading comprehension or not. The t-table was taken from the requirement of t-table to analyse the data. The t-table of 0,05 as the significant level was 2,000 with 78 the degree of freedom(df). Then, it can be stated that t-value (14.000) of post-test  $>$  t-table (2,000). It can be concluded that Group Invertigation Technique can enhance the students’ reading comprehension at the tenth grades of



MA Hasyim Asy'ari Bangsri Jepara in the academic year of 2018/2019.

#### 4.1.3 The Hypothesis Testing

This research aimed to answer the problem statement of reseach, the writer found out the effectiveness of Group Investigation Technique to enhance the students' reading comprehension (An Experimental Study at the tenth grade of MA Hasyim Asy'ari Bangsri Jepara in the academic year of 2018/2019). To prove the hypothesis, the data obtained in experimental and control group were calculated by using t-test formula in SPSS 25. Based on the discription of the data calculation, it shows that:

1. The t-value was 14,000
2. The degree of freedom (df) was 78, so the value of t-table was 2,000 in significance level of 0,05.

It showed that the result of post-test both experimental and control group was t-value (14,000) was higher than t-table (2,000). To conclude, the  $t\text{-value} > t\text{-table}$  means that  $H_0$  (the Null hypothesis) was rejected and  $H_a$  (The Alternative hypothesis) was accepted. Moreover, the stating that "Group Investigation Technique is effective to enhance the students' reading comprehension at the tenth grade of MA Hasyim Asy'ari Bangsri Jepara in the academic year of 2018/2019".

## 4.2 Discussion

The aim of this reach was to find out whether or not using group investigation Technique to enhance the students' reading comprehension of recount text in MA Hasyrim Asy'ari Bangsri Jepara.

Based on the result of the data, it showed that there was a significant between experimental group students' who taught by using group investigation technique and control group (who are not taught by using group investigation technique). As the result that was written in the table above the score of experimental and control group was different. In experimental group the mean score of pretest was 57.44, in contrast the mean score of post-test in experimental group was 77.47. It can be calculated that the score increased 20.03 points.

Meanwhile, the mean score of pretest in control group was 44.59 while the mean score of post-test was 60.34. It can be calculated that score increased 15.75 points. According to the calculation of the mean score in both of experimental and control group, it proved that there was significant effect of group investigation technique to enhance the students' reading comprehension.

Based on the data analysis of t-test, the result of post-test in experimental group and control group showed that the t-value was 14.000 and t-table of 0,05 as the significant was 2,000 with 78 degree of freedom (df). The result of t-value and t-table showed that t-value (14,000) > t-table (2,000). Then, the sig.(2 tailed)

was  $0,00 < 0.05$  which  $H_0$  is rejected and  $H_a$  was accepted. So, it can be concluded that the group investigation technique was effect to enhance the students' reading comprehension.

This research was related with the previous research that entitled "The Effect of Cooperative Learning Model Type Group Investigation Assisted Flash Media , Scientific Attitude on Students ' Conceptual Knowledge that written by Yuandini & Sahyar (2017)". Those result stated that the result of the average pre-test and post-test conceptual knowledge in experiment class and control class as follows: Pre-test on control class and experiment class were 38.5 and 41.0. Post-test on control class and experiment class were 62.0 and 70.0. It meant that group investigation technique was effective in Flash Media, Scientific Attitude on Students' Conceptual Knowledge.

In conclusion, implementing the group investigation technique (GIT) provided the positive effect to students' reading comprehension in recount text. The students are able to understand about the material in easy way, because the students were not just read the material, but the must read it, understand it and share to their friends. As a result, the steps in conduction Group Investigating Technique facilitated them for doing investigation with their friends in a group in order to check their understanding about the material. Teaching reading comprehension by using group investigation technique was fun and helpful especially for the tenth grade students' of MA Hasyim Asy'ari Bangsri Jepara.

