

**Title :** Focus SPM Mathematics KSSM Form 4.5

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Page number and section	Error	Correction																				
pg 28 Chapter 3 Logical Reasoning Example 4	<p>By using the word “not” and “no”, write the negation (<math>\sim p</math>) for each of the following statements (p).</p> <p>Solution (c) <math>\sqrt{49} \neq 8</math></p> <p>Example 5 Solution (b) Rhombus is a rectangle. True</p>	<p>By using the word “not” or “no”, write the negation (<math>\sim p</math>) for each of the following statements (p).</p> <p>Solution (d) <math>\sqrt{64} \neq 8</math></p> <p>Example 5 Solution (b) Rhombus is not a rectangle. True</p>																				
pg 32 Example 14 Solution (b)	<p>(b)</p> <table border="1"> <thead> <tr> <th>Statement</th> <th>True / False</th> </tr> </thead> <tbody> <tr> <td>Implication: If <math>y &gt; 8</math>, then <math>y &gt; 10</math>.</td> <td>False</td> </tr> <tr> <td>Converse: If <math>y &gt; 10</math>, then <math>y &gt; 8</math>.</td> <td>True</td> </tr> <tr> <td>Inverse: If <math>y &lt; 8</math>, then <math>y &lt; 10</math>.</td> <td>True</td> </tr> <tr> <td>Contrapositive: If <math>y &lt; 10</math>, then <math>y &lt; 8</math>.</td> <td>False</td> </tr> </tbody> </table>	Statement	True / False	Implication: If $y > 8$ , then $y > 10$ .	False	Converse: If $y > 10$ , then $y > 8$ .	True	Inverse: If $y < 8$ , then $y < 10$ .	True	Contrapositive: If $y < 10$ , then $y < 8$ .	False	<p>(b)</p> <table border="1"> <thead> <tr> <th>Statement</th> <th>True / False</th> </tr> </thead> <tbody> <tr> <td>Implication: If <math>y &gt; 8</math>, then <math>y &gt; 10</math>.</td> <td>False</td> </tr> <tr> <td>Converse: If <math>y &gt; 10</math>, then <math>y &gt; 8</math>.</td> <td>True</td> </tr> <tr> <td>Inverse: If <math>y \leq 8</math>, then <math>y \leq 10</math>.</td> <td>True</td> </tr> <tr> <td>Contrapositive: If <math>y \leq 10</math>, then <math>y \leq 8</math>.</td> <td>False</td> </tr> </tbody> </table>	Statement	True / False	Implication: If $y > 8$ , then $y > 10$ .	False	Converse: If $y > 10$ , then $y > 8$ .	True	Inverse: If $y \leq 8$ , then $y \leq 10$ .	True	Contrapositive: If $y \leq 10$ , then $y \leq 8$ .	False
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pg 33 Example 16 Solution (b)	<p>(b) Inverse: If <math>x &gt; 5</math>, then <math>x &gt; 8</math>. False Counter-example: <math>x = 6</math></p>	<p>(b) Inverse: If <math>x \geq 5</math>, then <math>x \geq 8</math>. False Counter-example: <math>x = 6</math></p>																				
pg 337 Answers <b>Chapter 3</b> Logical Reasoning <b>Try This! 3.1</b>	<p><b>15.</b>            (b) Converse: If <math>x &gt; y</math>, then <math>x - y &gt; 0</math>.            Inverse: If <math>x - y &lt; 0</math>, then <math>x &lt; y</math>.            Contrapositive: If <math>x &lt; y</math>, then <math>x - y &lt; 0</math>.              (c) Converse: If <math>a &gt; 0</math>, then <math>y = ax^2 + bx + c</math> has a minimum point.            Inverse: If <math>y = ax^2 + bx + c</math> has no minimum point, then <math>a &lt; 0</math>.            Contrapositive: If <math>a &lt; 0</math>, then <math>y = ax^2 + bx + c</math> has no minimum point.</p>	<p><b>15.</b>            (b) Converse: If <math>x &gt; y</math>, then <math>x - y &gt; 0</math>.            Inverse: If <math>x - y \leq 0</math>, then <math>x \leq y</math>.            Contrapositive: If <math>x \leq y</math>, then <math>x - y \leq 0</math>.              (c) Converse: If <math>a &gt; 0</math>, then <math>y = ax^2 + bx + c</math> has a minimum point.            Inverse: If <math>y = ax^2 + bx + c</math> has no minimum point, then <math>a \leq 0</math>.            Contrapositive: If <math>a \leq 0</math>, then <math>y = ax^2 + bx + c</math> has no minimum point.</p>																				
pg 338 Answers <b>Chapter 3</b> Logical Reasoning	<p><b>16.</b>            Implication: If <math>x &gt; 6</math>, then <math>x &gt; 4</math>. (True)            Converse: If <math>x &gt; 4</math>, then <math>x &gt; 6</math>. (False)            Inverse: If <math>x &lt; 6</math>, then <math>x &lt; 4</math>. (False)            Contrapositive: If <math>x &lt; 4</math>, then <math>x &lt; 6</math>. (True)</p>	<p><b>16.</b>            Implication: If <math>x &gt; 6</math>, then <math>x &gt; 4</math>. (True)            Converse: If <math>x &gt; 4</math>, then <math>x &gt; 6</math>. (False)            Inverse: If <math>x \leq 6</math>, then <math>x \leq 4</math>. (False)            Contrapositive: If <math>x \leq 4</math>, then <math>x \leq 6</math>. (True)</p>																				

<b>Try This! 3.1</b>	<b>20.</b> (c) Contrapositive: If $m > 5$ , then $m > 8$ . (False) Counter-example: $m = 6$	<b>20.</b> (c) Contrapositive: If $m \geq 5$ , then $m \geq 8$ . (False) Counter-example: $m = 6$
<b>pg 339 Answers Chapter 3 Logical Reasoning SPM Practice 3</b>	<b>7.</b> (c) Converse: If $a - b > 0$ , then $a > b$ . Inverse: If $a < b$ , then $a - b < 0$ . Contrapositive: If $a - b < 0$ , then $a < b$ .	<b>7.</b> (c) Converse: If $a - b > 0$ , then $a > b$ . Inverse: If $a \leq b$ , then $a - b \leq 0$ . Contrapositive: If $a - b \leq 0$ , then $a \leq b$ .
	<b>8.</b> (a) (ii) Implication: If $x > 8$ , then $x > 10$ . (false) Counter-example: $x = 9$ Converse: If $x > 10$ , maka $x > 8$ . (true) Inverse: If $x < 8$ , then $x < 10$ . (true) Contrapositive: If $x < 10$ , then $x < 8$ . (false) Counter-example: $x = 9$	<b>8.</b> (a) (ii) Implication: If $x > 8$ , then $x > 10$ . (false) Counter-example: $x = 9$ Converse: If $x > 10$ , maka $x > 8$ . (true) Inverse: If $x \leq 8$ , then $x \leq 10$ . (true) Contrapositive: If $x \leq 10$ , then $x \leq 8$ . (false) Counter-example: $x = 9$
<b>pg 100 no. 13</b>	<b>13.</b> Ahmad wanted to fence a rectangular land with width of $x$ m and length of $y$ m. The installation of this fence should follow the conditions below. (i) The total length of the fence shall be less than 140 m.	<b>13.</b> Ahmad wants to fence a rectangular land with a width of $x$ m and a length of $y$ m. The installation of this fence should follow the conditions below. (i) Ahmad has a fence which is less than 140 m.