

<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1?</i></p> <p>LDR R0, [R1]</p> <p>1</p>	<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1?</i></p> <p>LDR R0, [R1, #4]</p> <p>2</p>
<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1?</i></p> <p>LDR R0, [R1, #4]!</p> <p>3</p>	<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1?</i></p> <p>LDR R0, [R1], #4</p> <p>4</p>
<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1 and R2?</i></p> <p>LDR R0, [R1, R2]</p> <p>5</p>	<p><i>In the following instruction, what method of indexing is used, what will R0 contain and what will happen to R1 and R2?</i></p> <p>LDR R0, [R1, R2, LSL, #2]</p> <p>6</p>

*This is called **pre-indexed addressing**.*

The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in $R1 + 4$.

R1 won't be altered at all.

2

*This is called **register-indirect addressing**.*

The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in R1.

R1 won't be altered at all.

1

*This is called **post-indexed autoindexed addressing**.*

The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in $R1 + 4$.

R1 will be incremented by 4 after the load operation.

4

*This is called **pre-indexed autoindexed addressing**.*

The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in $R1 + 4$.

R1 will be incremented by 4 before the load operation.

3

*This is called **scaled register-indexed addressing**.*

*The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in $R1 + (R2 * 4)$.*

R1 and R2 will stay the same.

6

*This is called **register-indexed addressing**.*

The value loaded into R0 will be the 32 bits stored at the memory address that is equal to the value in $R1 + R2$.

R1 and R2 will stay the same.

5