Squares and Square Roots Ex 3.5 Q3

**Answer :**

(i) Using the long division method:

| | |
|---|---|
| | 75 |
| 7 | 5607 |
| 7 | 49 |
| 145 | 707 |
| 5 | 725 |
| | –18 |

We can see that 5607 is 18 more than $75^2$. Hence, we have to add 18 to 5607 to get a perfect square.

(ii) Using the long division method:

| | |
|---|---|
| | 71 |
| 7 | 4931 |
| 7 | 49 |
| 141 | 031 |
| 1 | 141 |
| | –110 |

We can see that 4931 is 110 more than $71^2$. Hence, we have to add 110 to 4931 to get a perfect square.

(iii) Using the long division method:

| | |
|---|---|
| | 2125 |
| 2 | 4515600 |
| 2 | 4 |
| 41 | 051 |
| 1 | 41 |
| 422 | 1056 |
| 2 | 844 |
| 4245 | 21200 |
| 5 | 21225 |
| | –25 |

We can see that 4515600 is 25 more than $2125^2$. Hence, we have to add 25 to 4515600 to get a perfect square.

(iv) Using the long division method:

| | |
|---|---|
| | 194 |
| 1 | 37460 |
| 1 | 1 |
| 29 | 274 |
| 9 | 261 |
| 384 | 1360 |
| 4 | 1536 |
| | –176 |

We can see that 37460 is 176 more than $194^2$. Hence, we have to add 176 to 37460 to get a perfect square.

(v) Using the long division method:

| | |
|---|---|
| | 712 |
| 7 | 506900 |
| 7 | 49 |
| 141 | 169 |
| 1 | 141 |
| 1422 | 2800 |
| 2 | 2844 |
| | –44 |

We can see that 506900 is 44 more than $712^2$. Hence, we have to add 44 to 506900 to get a perfect square.

********** END **********