Fill In The Blanks…

**Simplifying Surds**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Square Numbers** | $$1$$ | $$4$$ | $$9$$ | $$16$$ | $$25$$ | $$36$$ | $$49$$ | $$64$$ | $$81$$ | $$100$$ |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question** | **Largest Square** **Number Factor** | **Split into Two Surds** | **Rationalise the Square Number** | **Answer** |
| $$\sqrt{27}$$ | $$9$$ | $$\sqrt{9}×\sqrt{3}$$ | $$3×\sqrt{3}$$ | $$3\sqrt{3}$$ |
| $$\sqrt{24}$$ | $$4$$ | $$\sqrt{4}×\sqrt{6}$$ |  |  |
| $$\sqrt{50}$$ | $$25$$ |  |  |  |
| $$\sqrt{28}$$ |  |  |  |  |
| $$\sqrt{32}$$ |  |  |  |  |
| $$\sqrt{45}$$ |  |  |  |  |
| $$\sqrt{72}$$ |  |  |  |  |
| $$\sqrt{90}$$ |  |  |  |  |
| $$\sqrt{75}$$ |  |  |  |  |
| $$\sqrt{200}$$ |  |  |  |  |
| $$\sqrt{98}$$ |  |  |  |  |
| $$\sqrt{80}$$ |  |  |  |  |
|  |  | $$\sqrt{9}×\sqrt{7}$$ | $$3×\sqrt{7}$$ | $$3\sqrt{7}$$ |
|  |  |  |  | $$7\sqrt{3}$$ |