Fill In The Blanks…

**Simplifying Surds**

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| **Question** | **Surd as a Product of its Prime Factors** | **Simplify ‘Repeated’ Surds** | **Answer** |
| $$\sqrt{12}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{3}$$ | $$2×\sqrt{3}$$ | $$2\sqrt{3}$$ |
| $$\sqrt{45}$$ | $$\sqrt{3}×\sqrt{3}×\sqrt{5}$$ |  |  |
| $$\sqrt{18}$$ | $$\sqrt{2}×\sqrt{3}×\sqrt{3}$$ |  |  |
| $$\sqrt{75}$$ |  |  |  |
| $$\sqrt{20}$$ |  |  |  |
|  | $$\sqrt{7}×\sqrt{7}×\sqrt{2}$$ |  | $$7\sqrt{2}$$ |
|  |  |  | $$3\sqrt{7}$$ |
| $$\sqrt{48}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{3}$$ | $$2×2×\sqrt{3}$$ | $$4\sqrt{3}$$ |
| $$\sqrt{72}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{3}×\sqrt{3}$$ |  |  |
| $$\sqrt{200}$$ |  |  |  |
| $$\sqrt{162}$$ |  |  |  |
| $$\sqrt{675}$$ |  |  |  |
|  |  | $$2×3×\sqrt{5}$$ | $$6\sqrt{5}$$ |
|  |  |  | $$10\sqrt{3}$$ |
|  |  |  | $$8\sqrt{7}$$ |