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| **Fill in the Blanks** | **Simplifying Surds**  |

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| **Question** | **Surd as a Product of its Prime Factors** | **Simplify ‘Paired’ Surds** | **Answer** |
| $$\sqrt{12}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{3}$$ | $$2×\sqrt{3}$$ | $$2\sqrt{3}$$ |
| $$\sqrt{40}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{5}$$ | $$2×\sqrt{2}×\sqrt{5}$$ |  |
| $$\sqrt{18}$$ | $$\sqrt{2}×\sqrt{3}×\sqrt{3}$$ |  |  |
| $$\sqrt{75}$$ |  |  |  |
| $$\sqrt{20}$$ |  |  |  |
|  | $$\sqrt{3}×\sqrt{3}×\sqrt{2}×\sqrt{5}$$ |  | $$3\sqrt{10}$$ |
|  |  |  | $$3\sqrt{7}$$ |
| $$\sqrt{48}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{3}$$ | $$2×2×\sqrt{3}$$ | $$4\sqrt{3}$$ |
| $$\sqrt{72}$$ | $$\sqrt{2}×\sqrt{2}×\sqrt{2}×\sqrt{3}×\sqrt{3}$$ |  |  |
| $$\sqrt{200}$$ |  |  |  |
| $$\sqrt{162}$$ |  |  |  |
| $$\sqrt{675}$$ |  |  |  |
|  |  | $$5×\sqrt{2}×\sqrt{3}$$ | $$5\sqrt{6}$$ |
|  |  |  | $$10\sqrt{3}$$ |
|  |  |  | $$8\sqrt{7}$$ |