

Multiplying, Dividing and Simplifying Surds

| (a) | (b) | (c) | (d) | (e) |
|--|--|---|---|--|
| Simplify $\sqrt{5} \times \sqrt{7}$ $\sqrt{35}$ | Simplify $\sqrt{3} \times \sqrt{27}$ 9 | Simplify $\sqrt{10} \div \sqrt{2}$ $\sqrt{5}$ | Simplify $\frac{\sqrt{27}}{\sqrt{3}}$ 3 | Simplify $\sqrt{2} \times \sqrt{10} \times \sqrt{5}$ 10 |
| (f) | (g) | (h) | (i) | (j) |
| Simplify $2\sqrt{3} \times 4\sqrt{7}$ $8\sqrt{21}$ | Simplify $\sqrt{5} \times 8\sqrt{2}$ $8\sqrt{10}$ | Simplify $3\sqrt{5} \times 4\sqrt{5}$ 60 | Simplify $\frac{9\sqrt{6}}{3\sqrt{2}}$ $3\sqrt{3}$ | Simplify $\frac{\sqrt{48}}{\sqrt{3}}$ 4 |
| (k) | (l) | (m) | (n) | (o) |
| Simplify $\frac{10\sqrt{24}}{5\sqrt{6}}$ 4 | Simplify $\sqrt{12}$ $2\sqrt{3}$ | Simplify $\sqrt{28}$ $2\sqrt{7}$ | Simplify $\sqrt{35}$ $\sqrt{35}$ | Simplify $\sqrt{108}$ $6\sqrt{3}$ |
| (p) | (q) | (r) | (s) | (t) |
| Express $\sqrt{90}$ in the form $a\sqrt{10}$ where a is an integer $3\sqrt{10}$ | Express $\sqrt{75}$ in the form $a\sqrt{3}$ where a is an integer $5\sqrt{3}$ | Express $\sqrt{125}$ in the form $a\sqrt{5}$ where a is an integer $5\sqrt{5}$ | Simplify $\frac{\sqrt{200}}{5}$ $2\sqrt{2}$ | Simplify $\frac{\sqrt{112}}{2}$ $2\sqrt{7}$ |