

خاصیت جبر (5) اجزہ

1 1

①  $\sqrt{a} \times \sqrt{a} = a$

خواص خاصیت

$\sqrt{2} \times \sqrt{2} = 2$

$\sqrt{3} \times \sqrt{3} = 3$

②  $(\sqrt{2})^2 = 2$      $(\sqrt{2})^2 = 2$      $(\sqrt{3})^2 = 3$

③  $(\sqrt{2+7})^0 = 1$      $(\sqrt{2+7})^0 = 1$      $(\sqrt{5})^0 = 1$

مسائل حل کیے گئے

①  $\sqrt{5} + \sqrt{2} + 5\sqrt{5} - 3\sqrt{2}$   
 $= 6\sqrt{5} - 2\sqrt{2}$

②  $\sqrt{2} + 3\sqrt{3} - \sqrt{2} + \sqrt{3}$   
 $= 4\sqrt{3}$

$\sqrt{9} = 3$      $\sqrt{16} = 4$   
 $\sqrt{4} = 2$      $\sqrt{64} = 8$   
 $\sqrt{1} = 1$      $\sqrt{81} = 9$

$\sqrt{12} = 2\sqrt{3}$

$12 \overline{) 2}$   
 $6 \overline{) 2} \ 2$   
 $3 \ 3$   
 $1$   
 $2\sqrt{3}$

$\sqrt{50} = 5\sqrt{2}$

$50 \overline{) 2}$   
 $25 \overline{) 5} \ 5$   
 $5 \ 5$   
 $1$   
 $5\sqrt{2}$

$\sqrt{108} = 6\sqrt{3}$

$108 \overline{) 2}$   
 $54 \overline{) 2} \ 2$   
 $27 \ 3 \ 3$   
 $9 \ 3 \ 3$   
 $3 \ 3$   
 $1$   
 $6\sqrt{3}$

$\sqrt{75} = 5\sqrt{3}$

$75 \overline{) 3}$   
 $25 \overline{) 5} \ 5$   
 $5 \ 5$   
 $1$   
 $5\sqrt{3}$

$\sqrt{48} = 4\sqrt{3}$

$48 \overline{) 2}$   
 $24 \overline{) 2} \ 2$   
 $12 \overline{) 2} \ 2$   
 $6 \overline{) 2} \ 2$   
 $3 \ 3$   
 $1$   
 $4\sqrt{3}$

Galaxy

$$A = \frac{\sqrt{108} - 5\sqrt{3}}{\sqrt{3}}$$

A د

$$\begin{array}{r|l} 108 & 2 \\ 54 & 2 \\ 27 & 3 \\ 9 & 3 \\ 3 & 3 \\ 1 & \\ \hline & 6\sqrt{3} \end{array}$$

$$A = \frac{6\sqrt{3} - 5\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{\sqrt{3}} = 1$$

$$B = 2\sqrt{12} - 5\sqrt{3}$$

$$= 2(2\sqrt{3}) - 5\sqrt{3}$$

$$= 4\sqrt{3} - 5\sqrt{3} = -\sqrt{3}$$

$$\begin{array}{r|l} 12 & 2 \\ 6 & 2 \\ 3 & 3 \\ 1 & \\ \hline & 2\sqrt{3} \end{array}$$

إزالة الجذر من المقام (نضرب المقام والبسط بنفس الجذر) ✓

$$\textcircled{1} \rightarrow \frac{2}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \sqrt{2}$$

$$\textcircled{2} \rightarrow \frac{3}{\sqrt{3}} = \frac{3\sqrt{3}}{3} = \sqrt{3}$$

$$\textcircled{3} \rightarrow \frac{5}{\sqrt{10}} = \frac{5\sqrt{10}}{10} = \frac{\sqrt{10}}{2}$$

