



## Radicals - Multiplying Monomials (Values and Variables)

**1** Multiply the radical expressions and simplify the answer

$$\sqrt{27r} \cdot \sqrt{75r^2}$$

- |               |         |                 |       |
|---------------|---------|-----------------|-------|
| A             | B       | C               | D     |
| $45r\sqrt{r}$ | $45r^2$ | $45r^2\sqrt{r}$ | $45r$ |

**2** Multiply the radical expressions and simplify the answer

$$\sqrt{32r} \cdot \sqrt{8r}$$

- |       |       |     |         |      |
|-------|-------|-----|---------|------|
| A     | B     | C   | D       | E    |
| $16r$ | $48r$ | $r$ | $16r^2$ | $16$ |

**3** Multiply the radical expressions and simplify the answer

$$\sqrt{44t^2} \cdot \sqrt{99t^4}$$

- |       |          |         |                 |
|-------|----------|---------|-----------------|
| A     | B        | C       | D               |
| $t^3$ | $198t^3$ | $66t^3$ | $66t^2\sqrt{t}$ |

**4** Multiply the radical expressions and simplify the answer

$$\sqrt{75y^2} \cdot \sqrt{27y^2}$$

- |         |         |               |
|---------|---------|---------------|
| A       | B       | C             |
| $45y^3$ | $45y^2$ | $45y\sqrt{y}$ |

**5** Multiply the radical expressions and simplify the answer

$$\sqrt{50r^4} \cdot \sqrt{18r^3}$$

- |                 |                  |
|-----------------|------------------|
| A               | B                |
| $30r^3$         | $120r^3\sqrt{r}$ |
| C               |                  |
| $30r^3\sqrt{r}$ |                  |

**6** Multiply the radical expressions and simplify the answer

$$\sqrt{48x^3} \cdot \sqrt{27x^3}$$

- |                 |         |                 |         |
|-----------------|---------|-----------------|---------|
| A               | B       | C               | D       |
| $36x^3\sqrt{x}$ | $36x^4$ | $36x^2\sqrt{x}$ | $36x^3$ |

**7** Multiply the radical expressions and simplify the answer

$$\sqrt{32q^3} \cdot \sqrt{50q^2}$$

- |                  |                 |
|------------------|-----------------|
| A                | B               |
| $120q^2\sqrt{q}$ | $40q^2\sqrt{q}$ |
| C                | D               |
| $80q^2\sqrt{q}$  | $40q^3\sqrt{q}$ |

**8** Multiply the radical expressions and simplify the answer

$$\sqrt{50t^3} \cdot \sqrt{32t^4}$$

- |                 |                 |         |         |
|-----------------|-----------------|---------|---------|
| A               | B               | C       | D       |
| $40t^3\sqrt{t}$ | $40t^4\sqrt{t}$ | $40t^3$ | $40t^4$ |