

A.N.2: Simplifying Radicals 2: Simplify radical terms (no variable in the radicand)

- 1 What is $\sqrt{32}$ expressed in simplest radical form?
- 2 What is $\sqrt{72}$ expressed in simplest radical form?
- 3 What is $2\sqrt{45}$ expressed in simplest radical form?
- 4 What is $3\sqrt{250}$ expressed in simplest radical form?
- 5 When $5\sqrt{20}$ is written in simplest radical form, the result is $k\sqrt{5}$. What is the value of k ?
- 6 What is $\frac{\sqrt{32}}{4}$ expressed in simplest radical form?
- 7 Express $4\sqrt{75}$ in simplest radical form.
- 8 Express $5\sqrt{72}$ in simplest radical form.
- 9 Express $-3\sqrt{48}$ in simplest radical form.
- 10 Express $2\sqrt{108}$ in simplest radical form.

A.N.2: Simplifying Radicals 2: Simplify radical terms (no variable in the radicand)**Answer Section**

1 ANS:

$$4\sqrt{2}$$

$$\sqrt{32} = \sqrt{16} \sqrt{2} = 4\sqrt{2}$$

REF: 060910ia

2 ANS:

$$6\sqrt{2}$$

$$\sqrt{72} = \sqrt{36} \sqrt{2} = 6\sqrt{2}$$

REF: 010920ia

3 ANS:

$$6\sqrt{5}$$

$$2\sqrt{45} = 2\sqrt{9} \sqrt{5} = 6\sqrt{5}$$

REF: 011203ia

4 ANS:

$$15\sqrt{10}$$

$$3\sqrt{250} = 3\sqrt{25} \sqrt{10} = 15\sqrt{10}$$

REF: 061106ia

5 ANS:

$$10$$

$$5\sqrt{20} = 5\sqrt{4} \sqrt{5} = 10\sqrt{5}$$

REF: 080922ia

6 ANS:

$$\sqrt{2}$$

$$\frac{\sqrt{32}}{4} = \frac{\sqrt{16} \sqrt{2}}{4} = \sqrt{2}$$

REF: 060828ia

7 ANS:

$$4\sqrt{75} = 4\sqrt{25} \sqrt{3} = 20\sqrt{3}$$

REF: 011331ia

8 ANS:

$$30\sqrt{2} \cdot 5\sqrt{72} = 5\sqrt{36} \sqrt{2} = 30\sqrt{2}$$

REF: fall0731ia

9 ANS:

$$-3\sqrt{48} = -3\sqrt{16} \sqrt{3} = -12\sqrt{3}$$

REF: 081033ia

10 ANS:

$$2\sqrt{108} = 2\sqrt{36} \sqrt{3} = 12\sqrt{3}$$

REF: 081332ia