Warm Up Questions

1. **Write as an entire radical**

a) $4\sqrt{5}$ b) $6\sqrt{7}$ c) $3\sqrt{10}$ d) $8\sqrt{11}$

2. **Reduce each of the following Radicals**

a) $4\sqrt{50}$ b) $6\sqrt{48}$ c) $\sqrt{100}$ d) $\sqrt{704}$

3. **State which of the following are equivalent to $\sqrt{112}$**

$-2\sqrt{28}$ $3\sqrt{48}$ $4\sqrt{7}$ $2\sqrt{56}$ $2\sqrt{28}$

1. Write as an entire radical

a) $4\sqrt{5}$ b) $6\sqrt{7}$ c) $3\sqrt{10}$ d) $8\sqrt{11}$

$\sqrt{5 \times 16}$ $\sqrt{7 \times 36}$ $\sqrt{10 \times 9}$ $\sqrt{11 \times 64}$

$= \sqrt{80}$ $= \sqrt{252}$ $= \sqrt{90}$ $= \sqrt{704}$

2. Reduce each of the following Radicals

a) $4\sqrt{50}$ b) $6\sqrt{48}$ c) $\sqrt{100}$ d) $\sqrt{704}$

$4\sqrt{25 \times 2}$ $6\sqrt{16 \times 3}$ $= 10$ $\sqrt{64 \times 11}$

$= 20\sqrt{2}$ $= 24\sqrt{3}$ $= 8\sqrt{11}$

3. State which of the following are equivalent to $\sqrt{112}$

$-2\sqrt{28}$ $\quad 3\sqrt{48}$ $\quad 4\sqrt{7}$ $\quad 2\sqrt{56}$ $\quad 2\sqrt{28}$