

## Tercero Medio (Modulo 7)

Descomponer

$$1) \sqrt{300} = \sqrt{100 \cdot 3} \\ = 10\sqrt{3}$$

$$2) \sqrt{360} = \sqrt{36 \cdot 10} \\ = 6\sqrt{10}$$

$$3) \sqrt{750} = \sqrt{25 \cdot 30} \\ = 5\sqrt{30}$$

$$4) \sqrt{1000} = \sqrt{100 \cdot 10} \\ = 10\sqrt{10}$$

$$5) \sqrt{2000} = \sqrt{400 \cdot 5} \\ = 20\sqrt{5}$$

$$6) \sqrt{800} = \sqrt{400 \cdot 2} \\ = 20\sqrt{2}$$

Resolver

$$1) 3\sqrt{2} + 5\sqrt{2} - 7\sqrt{2} \\ (3+5-7)\sqrt{2} \\ 1\sqrt{2} \\ \boxed{\sqrt{2}}$$

$$2) \sqrt{32} + \sqrt{50} \\ \sqrt{16 \cdot 2} + \sqrt{25 \cdot 2} \\ 4\sqrt{2} + 5\sqrt{2} \\ \boxed{9\sqrt{2}}$$

$$3) \sqrt{27} + 2\sqrt{48} - \sqrt{75} \\ \sqrt{9 \cdot 3} + 2\sqrt{16 \cdot 3} - \sqrt{25 \cdot 3} \\ 3\sqrt{3} + 2 \cdot 4\sqrt{3} - 5\sqrt{3} \\ 3\sqrt{3} + 8\sqrt{3} - 5\sqrt{3} \\ \boxed{6\sqrt{3}}$$

$$4) 2\sqrt{45} + 3\sqrt{20} \\ 2\sqrt{9 \cdot 5} + 3\sqrt{4 \cdot 5} \\ 2 \cdot 3\sqrt{5} + 3 \cdot 2\sqrt{5} \\ 6\sqrt{5} + 6\sqrt{5} \\ \boxed{12\sqrt{5}}$$

$$5) \sqrt{28} + \sqrt{44} - \sqrt{63}$$

$$\sqrt{4 \cdot 7} + \sqrt{4 \cdot 11} + \sqrt{9 \cdot 7}$$

$$2\sqrt{7} + 4\sqrt{11} + 3\sqrt{7}$$

$$\boxed{5\sqrt{7} + 4\sqrt{11}}$$

$$6) \sqrt{40} - \sqrt{90} + 3\sqrt{32}$$

$$\sqrt{4 \cdot 10} - \sqrt{9 \cdot 10} + 3\sqrt{4 \cdot 8}$$

$$2\sqrt{10} - 3\sqrt{10} + 6\sqrt{8}$$

$$\boxed{-\sqrt{10} + 6\sqrt{8}}$$

$$7) \sqrt{80} - 4\sqrt{28} + \sqrt{63} - \sqrt{20}$$

$$\sqrt{16 \cdot 5} - 4\sqrt{4 \cdot 7} + \sqrt{9 \cdot 7} - \sqrt{4 \cdot 5}$$

$$4\sqrt{5} - 4 \cdot 2\sqrt{7} + 3\sqrt{7} - 2\sqrt{5}$$

$$2\sqrt{5} - 8\sqrt{7} + 3\sqrt{7}$$

$$\boxed{2\sqrt{5} - 5\sqrt{7}}$$

$$8) 5\sqrt{5} + 4\sqrt{20} - 3\sqrt{45}$$

$$5\sqrt{5} + 4\sqrt{4 \cdot 5} - 3\sqrt{9 \cdot 5}$$

$$5\sqrt{5} + 8\sqrt{5} - 9\sqrt{5}$$

$$13\sqrt{5} - 9\sqrt{5}$$

$$\boxed{4\sqrt{5}}$$