

**Multiplying RadicalsMan**

**...take two.**

$$1. (3\sqrt{5} + 6\sqrt{7})(4\sqrt{2} - 5\sqrt{7})$$

$$12\sqrt{10} - 15\sqrt{35} + 24\sqrt{14} - 30\sqrt{49}$$

$$= 12\sqrt{10} - 15\sqrt{35} + 24\sqrt{14} - 210$$

Find the area!

2.

$$2\sqrt{3} + 6\sqrt{5}$$

$$A = b \times h$$

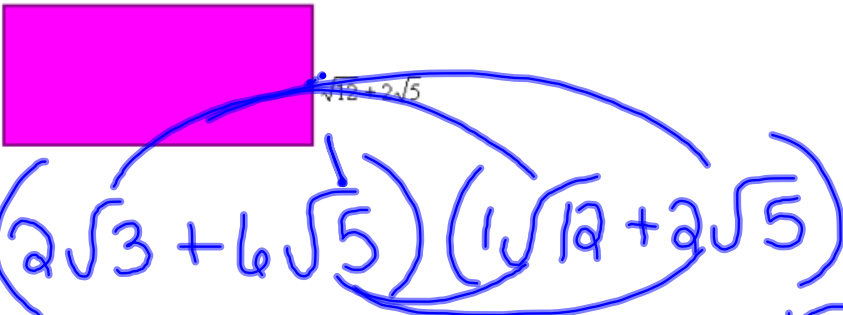


$$\sqrt{12} + 2\sqrt{5}$$

Find the area!

2.

$2\sqrt{3} + 6\sqrt{5}$



$(2\sqrt{3} + 6\sqrt{5})(\sqrt{12} + 2\sqrt{5})$

$2\sqrt{36} + 4\sqrt{15} + 6\sqrt{60} + 12\sqrt{25}$

$2(6) + 4\sqrt{15} + 6\sqrt{4 \cdot 15} + 12(5)$

$(12) + \underline{4\sqrt{15}} + \underline{12\sqrt{15}} + (60)$

$72 + 16\sqrt{15}$

Find the area!

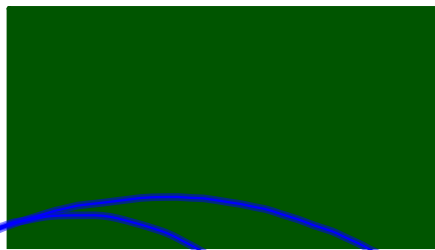
$$6\sqrt{12} + 3\sqrt{20}$$



$$3\sqrt{3} + \sqrt{8}$$

Find the area!

$$6\sqrt{12} + 3\sqrt{20}$$



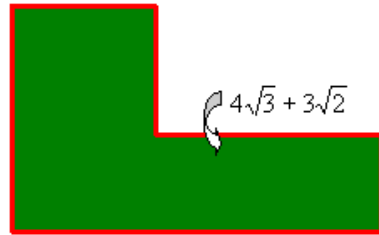
$$3\sqrt{3} + \sqrt{8}$$

$$(6\sqrt{12} + 3\sqrt{20})(3\sqrt{3} + \sqrt{8})$$

$$\begin{aligned} & 18\sqrt{36} + 6\sqrt{96} + 9\sqrt{60} + 3\sqrt{160} \\ & 18(6) + 6\sqrt{16}6 + 9\sqrt{4}15 + 3\sqrt{16}10 \\ & 108 + 24\sqrt{6} + 18\sqrt{15} + 12\sqrt{10} \end{aligned}$$

3.

$$5\sqrt{12} - \sqrt{50}$$



$$2\sqrt{3} + 2\sqrt{2}$$

$$2\sqrt{75} + 3\sqrt{8}$$

$$(3\sqrt{6} - 2\sqrt{10})(4\sqrt{5} - 3\sqrt{8})$$