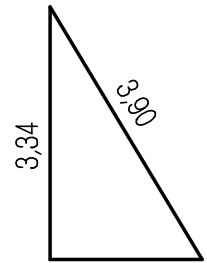


# Lösungen zum Arbeitsblatt

## 1, Fläche eines Raumes

$$* = \sqrt{3,90^2 - 3,34^2} = \sqrt{4,054} = \underline{2,014\text{m}}$$



$$a = 4,065 + 2,014 = \underline{6,079\text{m}}$$

$$A = \frac{a + c}{2} * h = \frac{6,079 + 4,065}{2} * 3,34 = \underline{16,94\text{m}^2}$$

$$U = 3,34 + 4,065 + 3,90 + 6,079 = \underline{17,38\text{m}}$$

## 2, Innenhof eines Gebäudes

$$d = \sqrt{45,35^2 + 38,40^2} = \sqrt{3531,18} = \underline{59,424\text{m}}$$

$$l = \sqrt{59,424^2 - 24,13^2} = \sqrt{2948,95} = \underline{54,304\text{m}}$$

$$A = \frac{45,35 * 38,40}{2} + \frac{24,13 * 54,304}{2} =$$
$$= 870,72 + 655,18 = \underline{1525,90\text{m}^2}$$

$$U = 45,35 + 38,40 + 24,13 + 54,304 = \underline{162,18\text{m}}$$

## 3, Giebelwand

$$h = 8,50 - 5,25 = 3,25\text{m} \quad h_1 = 1,20\text{m} \quad h_2 = 2,05\text{m}$$

$$h_3 = 2,30\text{m} \quad h_4 = 0,95\text{m}$$

$$A = 9,60 * 3,25 - \frac{2,61 * 0,95}{2} - \frac{5,632 * 2,05}{2} =$$
$$= 31,20 - 1,24 - 5,77 = \underline{24,19\text{m}^2}$$

$$l_1 = \sqrt{5,632^2 + 2,05^2} = \sqrt{35,92} = \underline{5,99\text{m}}$$

$$l_2 = \sqrt{2,61^2 + 0,95^2} = \sqrt{7,71} = \underline{2,78\text{m}}$$

$$U = 9,60 + 1,20 + 5,99 + 1,36 + 2,78 + 2,30 = \underline{23,23\text{m}}$$