

ons :

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

$$3 + \sqrt{5} = -14\sqrt{3} + 6\sqrt{5}$$

$$13\sqrt{11} = 9\sqrt{11} + 4\sqrt{13}$$

$$7 + 7\sqrt{5} = 4\sqrt{5} - 2\sqrt{7}$$

$$\sqrt{11} - 7\sqrt{2} = -15\sqrt{2} + \sqrt{11}$$

écriture exacte des nombres.

Exercice n°6

Calculer les carrés :

a. $(\sqrt{5})^2 =$

b. $(3\sqrt{2})^2 =$

c. $(-2\sqrt{3})^2 =$

d. $(2\sqrt{11})^2 =$

e. $(5\sqrt{2})^2 =$

f. $(6\sqrt{3})^2 =$

g. $(-2\sqrt{7})^2 =$

h. $(-9\sqrt{11})^2 =$

b. $2\sqrt{7} \times 5\sqrt{7} =$

d. $-\sqrt{2} \times \sqrt{2} =$

f. $7\sqrt{3} \times (-2\sqrt{3}) =$

h. $\sqrt{2} \times \sqrt{2} \times \sqrt{2} =$

Correction:

Exercice 5

- a) $\sqrt{2} \times 3\sqrt{2} = \sqrt{2} \times 3 \times \sqrt{2} = \sqrt{2} \times \sqrt{2} \times 3 = \sqrt{2}^2 \times 3 = 2 \times 3 = 6.$
- b) $2\sqrt{7} \times 5\sqrt{7} = 2 \times \sqrt{7} \times 5 \times \sqrt{7} = 2 \times 5 \times \sqrt{7} \times \sqrt{7} = 10 \times \sqrt{7}^2 = 10 \times 7 = 70$
- c) $3\sqrt{5} \times 4\sqrt{5} = 3 \times \sqrt{5} \times 4 \times \sqrt{5} = 3 \times 4 \times \sqrt{5} \times \sqrt{5} = 12 \times \sqrt{5}^2 = 12 \times 5 = 60$
- d) $-\sqrt{2} \times \sqrt{2} = -\sqrt{2}^2 = -2.$
- e) $-3\sqrt{2} \times (-5\sqrt{2}) = -3 \times \sqrt{2} \times (-5) \times \sqrt{2} = -3 \times (-5) \times \sqrt{2} \times \sqrt{2} = 15 \times \sqrt{2}^2 = 15 \times 2 = 30$
- f) $7\sqrt{3} \times (-2\sqrt{3}) = 7 \times \sqrt{3} \times (-2) \times \sqrt{3} = 7 \times (-2) \times \sqrt{3}^2 = -14 \times 3 = -42.$
- g) $5\sqrt{5} \times (-2\sqrt{5}) = 5 \times \sqrt{5} \times (-2) \times \sqrt{5} = 5 \times (-2) \times \sqrt{5} \times \sqrt{5} = -10 \times \sqrt{5}^2 = -10 \times 5 = -50.$
- h) $\sqrt{2} \times \sqrt{2} \times \sqrt{2} = \sqrt{2}^2 \times \sqrt{2} = 2 \times \sqrt{2} = 2\sqrt{2}.$
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Exercice 6:

- a) $(\sqrt{5})^2 = 5$
- b) $(3\sqrt{2})^2 = 3\sqrt{2} \times 3\sqrt{2} = 3 \times \sqrt{2} \times 3 \times \sqrt{2} = 3 \times 3 \times \sqrt{2} \times \sqrt{2} = 9 \times \sqrt{2}^2 = 9 \times 2 = 18.$
- c) $(-2\sqrt{3})^2 = -2\sqrt{3} \times (-2\sqrt{3}) = -2 \times \sqrt{3} \times (-2) \times \sqrt{3} = -2 \times (-2) \times \sqrt{3} \times \sqrt{3} = (-2)^2 \times \sqrt{3}^2 = 4 \times 3 = 12.$
- d) $(2\sqrt{11})^2 = 2\sqrt{11} \times 2\sqrt{11} = 2 \times 2 \times \sqrt{11} \times \sqrt{11} = 2^2 \times \sqrt{11}^2 = 4 \times 11 = 44.$
- e) $(5\sqrt{2})^2 = 5\sqrt{2} \times 5\sqrt{2} = 5 \times 5 \times \sqrt{2} \times \sqrt{2} = 5^2 \times \sqrt{2}^2 = 25 \times 2 = 50$
- f) $(6\sqrt{3})^2 = 108$ g) $(-2\sqrt{7})^2 = 28$ h) $(-9\sqrt{11})^2 = 891.$