

Entraînement 1 Simplifie au maximum les expressions suivantes : **SANS LA CALCULATRICE !!!**

$$A = \sqrt{49} =$$

$$B = \sqrt{81} + \sqrt{9} =$$

$$C = \sqrt{5} \times \sqrt{20} =$$

$$D = \sqrt{400} =$$

$$E = \sqrt{2500} =$$

$$F = \sqrt{0,04} =$$

$$G = (\sqrt{2})^2 =$$

$$H = \sqrt{5^2} =$$

$$I = \sqrt{(-8)^2} =$$

Entraînement 2 Simplifie au maximum les expressions suivantes :

$$A = \sqrt{7} \times \sqrt{3}$$

$$B = \sqrt{7} \times 3$$

$$C = \sqrt{6} \times \sqrt{10}$$

$$A = \sqrt{\dots \times \dots}$$

$$B = \dots \times \sqrt{\dots}$$

$$C = \sqrt{\dots \times \dots}$$

$$A = \sqrt{\dots}$$

$$B = \dots \sqrt{\dots}$$

$$C = \sqrt{\dots}$$

$$D = \sqrt{7} \times 10$$

$$E = \sqrt{7} \times \sqrt{10}$$

$$F = 8 \times \sqrt{13} \times 2$$

Multiplication et racines carrées

$$\sqrt{5} \times \sqrt{7} = \sqrt{5 \times 7} = \sqrt{35}$$

$$\sqrt{5} \times 7 = 7 \times \sqrt{5} = 7\sqrt{5}$$

Entraînement 3 Simplifie les expressions suivantes

$$A = 2(\sqrt{7} + 4)$$

$$B = 3(\sqrt{2} - 5)$$

$$C = 5(6 - \sqrt{6})$$

$$A = \dots \times \sqrt{7} + \dots \times 4$$

$$A =$$

$$D = 2(3\sqrt{3} + 8)$$

$$E = 9(6\sqrt{10} - 5)$$

$$F = 10(6 - 3\sqrt{8})$$

$$\begin{aligned} A &= 4(\sqrt{2} + 3) \\ A &= 4 \times \sqrt{2} + 4 \times 3 \\ A &= 4\sqrt{2} + 12 \end{aligned}$$

Entraînement 4 Simplifie au maximum les expressions suivantes :

$$A = \sqrt{2} \times (\sqrt{7} + 3)$$

$$B = \sqrt{3} \times (3 + \sqrt{2})$$

$$C = \sqrt{10} \times (5 - \sqrt{2})$$

Multiplication de racines carrées

$$\begin{aligned} A &= \sqrt{5}(\sqrt{3} + 4) \\ A &= \sqrt{5 \times 3} + \sqrt{5 \times 4} \\ A &= \sqrt{15} + 4\sqrt{5} \end{aligned}$$

$$D = \sqrt{2}(\sqrt{8} + 3)$$

$$E = \sqrt{32}(3 + \sqrt{2})$$

$$F = \sqrt{10}(5 - \sqrt{10})$$

$$\begin{aligned} B &= \sqrt{5}(\sqrt{20} + 4) \\ B &= \sqrt{5 \times 20} + \sqrt{5 \times 4} \\ B &= \sqrt{100} + 4\sqrt{5} \\ B &= 10 + 4\sqrt{5} \end{aligned}$$

