SOLUCIÓN Guía de Raíces “Segundo Medio”

1. Completa la siguiente imagen, identificando correctamente los elementos de una raíz.



1. Determina el valor de las siguientes raíces, utiliza el método de descomposición cuando sea posible.

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| --- | --- | --- | --- | --- | --- |
| = 3 | $= 2\sqrt{3}$ | $=4$ | $= 2\sqrt{5}$ | $= 3\sqrt{3}$ | $= 2\sqrt{7}$ |
| = 6 | $= 3\sqrt{5}$ | $=4\sqrt{3}$ | $= 7$ | $= 5\sqrt{2}$ | $= 2\sqrt{3}$ |
| = $3\sqrt{6}$ | $= 12\sqrt{3}$ | $= 12\sqrt{2}$ | $= 20\sqrt{3}$ | $= 100\sqrt{10}$ | $= 3\sqrt{11}$ |

1. REALIZA LAS SIGUIENTES OPERACIONES DE RAÍCES.

|  |  |  |  |
| --- | --- | --- | --- |
| $$\sqrt{27}∙\sqrt{3}$$$$= \sqrt{81}$$$$=9$$ | $$\frac{\sqrt{32}}{\sqrt{2}}$$$$= \sqrt{32:2 }$$$$=\sqrt{16}$$$$=4$$ | $$\sqrt{4}∙\sqrt{81}$$$$= 2∙9$$$$=18$$ | $$\frac{\sqrt{16}}{\sqrt{4}}$$$$=\frac{4}{2}$$$$=2$$ |
| $$\sqrt{\frac{25}{9}}$$$$=\frac{\sqrt{25}}{\sqrt{9}}$$$$=\frac{5}{3}$$ | $$\sqrt{3}∙\sqrt{12}$$$$= \sqrt{3∙12}$$$$=\sqrt{36}$$$$=6$$ | $$\sqrt{8}∙\sqrt{2}$$$$= \sqrt{8∙2}$$$$=\sqrt{16}$$$$=4$$ | $$\sqrt{\frac{36}{4}}$$$$=\sqrt{9}$$$$=3$$ |
| $$\sqrt{2}∙\sqrt{18}$$$$= \sqrt{2∙18}$$$$=\sqrt{36}$$$$=6$$ | $$2\sqrt{2}∙4\sqrt{6} $$$$= 2∙4\sqrt{2∙6}$$$$=8\sqrt{12}$$$$=8∙2\sqrt{3}$$$$=16\sqrt{3}$$ | $$20\sqrt{8}:10\sqrt{2}=\left(20:10\right)\sqrt{8:2}$$$$=2\sqrt{4}$$$$=2∙2$$$$=4$$ | $$\frac{\sqrt{100}}{\sqrt{2}}$$$$=\sqrt{100:2}$$$$=\sqrt{50}$$$$=5\sqrt{2}$$ |