

Nombre:

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Grado:

4.to Perito en Administración de Empresas

Curso:

Matemáticas

Catedrática:

Sandra Díaz

Tarea: #3



Actividad #3

Resuelva los siguientes ejercicios

$$a) \frac{3 + \sqrt{8}}{5} = \frac{3 + 2.83}{5} = \frac{5.83}{5} = 1.17$$

$$b) \frac{7 - \sqrt{3}}{2} = \frac{7 - 1.73}{2} = \frac{5.27}{2} = 2.64$$

$$c) \frac{4}{7 - \sqrt{2}} = \frac{4}{7 - 1.41} = \frac{4}{5.59} = 0.72$$

$$d) \frac{1}{1 + \sqrt{2}} = \frac{1}{1 + 1.41} = \frac{1}{2.41} = 0.41$$

$$e) \frac{9 + \sqrt{15}}{11 - \sqrt{3}} = \frac{9 + 3.87}{11 - 1.73} = \frac{12.87}{9.27} = 1.39$$

$$f) \frac{15 - \sqrt{75}}{1 + \sqrt{15}} = \frac{15 - 8.66}{1 + 10.72} = \frac{6.34}{11.72} = 0.54$$

$$g) \frac{7 + \sqrt{68}}{16 - \sqrt{35}} + (\sqrt{5})^4 = \frac{7 + 8.25}{16 - 5.92} + 25 =$$

$$\frac{15.25}{10.08} + 25 = 1.51 + 25 = 26.51$$

$$h) \sqrt{\frac{\sqrt{6 \times 18}}{(-\sqrt{8})^3 \times \sqrt{3}}} = \sqrt{\frac{10.39}{22.63 \times 1.73}} =$$

$$\sqrt{\frac{10.39}{39.15}} = \sqrt{0.27} = 0.52$$

$$i) \frac{(\sqrt[3]{\sqrt{735,091}})^2}{(\sqrt{49+4})^3} = \frac{\sqrt[3]{540,358,778,281}}{\sqrt{148877}}$$

$$= \frac{\sqrt{735091}}{385.85} = \sqrt[3]{1905.12} = 12.40$$

$$j) \frac{25 + \sqrt{42}}{17 + \sqrt{45}} * (\sqrt{3})^3 = \frac{25 + 6.48}{17 + 6.71} * 5.20$$

$$= \frac{31.48}{23.71} * 5.20 = 1.33 * 5.20 = 6.92$$

Utilizo las propiedades de radicación y encuentro el resultado

$$1. \sqrt{\frac{36}{49}} * \sqrt{\frac{14,884}{24,025}} = \frac{6}{49} * \frac{122}{24,025} =$$

$$0.12 * 0.01 = 0.0012$$

$$2. (\sqrt{\sqrt{50625}})^2 = \sqrt{2562890625} =$$

$$\sqrt{50625} = 225$$

$$3. (\sqrt{\sqrt{8}})^3 + \sqrt[3]{729} = \sqrt{512} + \sqrt{9} =$$

$$22.63 + 3 = 25.63$$

$$4. \left(\frac{\sqrt{\sqrt{707,281}}}{(\sqrt[3]{218+125})} \right)^3 = \left(\frac{\sqrt{841}}{\sqrt[3]{343}} \right)^3 =$$

$$\frac{\sqrt{594,823,321}}{7} = \sqrt{84,974,760.14}$$

$$= 9218.18$$

$$5. \sqrt{\frac{\sqrt{36 \times 3}}{(\sqrt{4})^3 \times \sqrt{9}}} + (\sqrt{16+9})^3 =$$

$$\frac{\sqrt{108}}{\sqrt{64} \times \sqrt{3}} + \sqrt{15625} = \frac{\sqrt{10.39}}{8 \times 1.73} + 125$$

$$= \frac{\sqrt{10.39}}{13.84} + 125 = \sqrt{0.75} + 125$$

$$= 0.87 + 125 = 125.87$$