23. $\sqrt[3]{16y^3}$

$\sqrt[3]{8}\ \sqrt[3]{2}\ \sqrt[3]{y^3}$

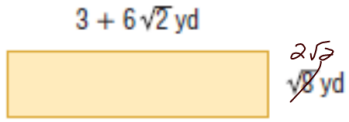
$2y\sqrt[3]{2}$

52. What is $\sqrt{39}$ divided by $\sqrt{26}$?

$\frac{\sqrt{39}}{\sqrt{26}} \cdot \frac{\sqrt{26}}{\sqrt{26}} = \frac{\sqrt{1014}}{\sqrt{676}} = \frac{\cancel{13}^{1}\sqrt{6}}{\cancel{26}_{2}} = \frac{\sqrt{6}}{2}$

$\sqrt{\frac{39}{26}} = \sqrt{\frac{3}{2}}$ $\quad \frac{\sqrt{1014}}{\sqrt{169}\sqrt{6}}$

$\frac{\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{6}}{\sqrt{4}} = \frac{\sqrt{6}}{2}$



$P = 3 + 6\sqrt{2} + \sqrt{8} + 3 + 6\sqrt{2} + \sqrt{8}$

$2\sqrt{8}$
$2\sqrt{4}\sqrt{2}$
$2 \cdot 2\sqrt{2}$

$P = 3 + 6\sqrt{2} + 3 + 6\sqrt{2} + 4\sqrt{2} \leftarrow 4\sqrt{2}$

$P = 6 + 16\sqrt{2}$ yd

$A = (3 + 6\sqrt{2})\sqrt{8}$

$= 3\sqrt{8} + 6\sqrt{16}$

$3\sqrt{4}\sqrt{2} + 6 \cdot 4$

$3 \cdot 2\sqrt{2}$

$A = 6\sqrt{2} + 24$ yd^2

44. $(\sqrt{11}-\sqrt{2})^2$

$(\sqrt{11}-\sqrt{2})(\sqrt{11}-\sqrt{2})$

$\sqrt{121}+\sqrt{4}-\sqrt{22}-\sqrt{22}$

$11+2$

$13-2\sqrt{22}$

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49. $\dfrac{2+\sqrt{2}}{5-\sqrt{2}}\cdot\dfrac{5+\sqrt{2}}{5+\sqrt{2}}=\dfrac{10+2\sqrt{2}+5\sqrt{2}+\sqrt{4}}{25+\cancel{5\sqrt{2}}-\cancel{5\sqrt{2}}-\sqrt{4}}$ $+2$ -2

$=\dfrac{12+7\sqrt{2}}{23}$

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46 $\dfrac{7}{4-\sqrt{3}}\cdot\dfrac{4+\sqrt{3}}{4+\sqrt{3}}=\dfrac{28+7\sqrt{3}}{16+\cancel{4\sqrt{3}}-\cancel{4\sqrt{3}}-\sqrt{9}}$ -3

$=\dfrac{28+7\sqrt{3}}{13}$

41. $5\sqrt{20} + \sqrt{24} - \sqrt{180} + 7\sqrt{54}$

$5\sqrt{4}\sqrt{5}$ $\quad \sqrt{4}\sqrt{6}$ $\quad \sqrt{36}\sqrt{5}$ $\quad 7\sqrt{9}\sqrt{6}$

$5 \cdot 2$ $\quad 7 \cdot 3$

$10\sqrt{5} + 2\sqrt{6} - 6\sqrt{5} + 21\sqrt{6}$

$4\sqrt{5} + 23\sqrt{6}$