

Review for Ch. 12
Test

May 24, 2007

$$\underline{6}\sqrt{3} + \underline{7}\sqrt{3} = \underline{\underline{13\sqrt{3}}}$$

$$\sqrt{3} + \sqrt{27} + \sqrt{12}$$

$$\sqrt{3} + \sqrt{9} \cdot \sqrt{3} + \sqrt{4} \cdot \sqrt{3}$$

$$\underline{1}\sqrt{3} + \underline{3}\sqrt{3} + \underline{2}\sqrt{3}$$

$$\underline{\underline{6\sqrt{3}}}$$

$$\sqrt{5} \cdot \sqrt{45} = \sqrt{225}$$

$$\begin{array}{r} 45 \\ \times 5 \\ \hline 225 \end{array}$$

$$= \underline{\underline{15}}$$

$$\sqrt{5} \cdot \sqrt{45}$$

$$\sqrt{5} \cdot \sqrt{9} \cdot \sqrt{5}$$

$$5 \cdot 3 = \underline{\underline{15}}$$

$$(2 + \sqrt{5})(2 - \sqrt{5})$$

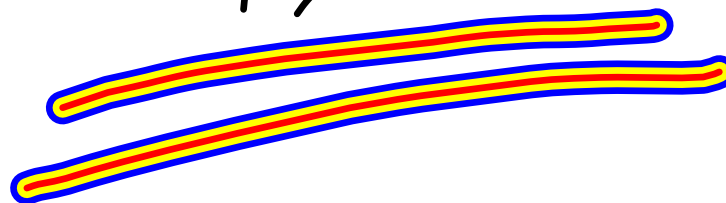
$$2(2) + 2(-\sqrt{5}) + \sqrt{5}(2) + \sqrt{5}(-\sqrt{5})$$

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

$$\underline{\underline{= -1}}$$

$$\frac{5}{(7+\sqrt{2})} \cdot \frac{(7-\sqrt{2})}{(7-\sqrt{2})} = \frac{5(7-\sqrt{2})}{(7+\sqrt{2})(7-\sqrt{2})}$$

$$= \frac{5(7-\sqrt{2})}{49-2} = \frac{5(7-\sqrt{2})}{47}$$



Determine if the three points make a right triangle

$$(-3, -2), (3, 4), (-8, 3)$$

$$\begin{aligned}d &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\&= \sqrt{(-)^2 + (-)^2} \\&= \sqrt{(\quad)^2 + (\quad)^2} \\&= \sqrt{\quad + \quad} \\&= \sqrt{\quad}\end{aligned}$$

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$$\begin{aligned}(\text{leg}_1)^2 + (\text{leg}_2)^2 &= (\text{hyp})^2 \\(\quad)^2 + (\quad)^2 &= (\quad)^2\end{aligned}$$

$$\sqrt{x-3} + 5 = 12$$

$$\frac{\sqrt{x-3} + 5 = 12}{-5 \quad -5}$$

$$(\sqrt{x-3})^2 = (7)^2$$

$$x-3 = 49$$

$$\frac{x-3 = 49}{+3 \quad +3}$$

$$\underline{\underline{x = 52}}$$

$$(\sqrt{x+6})^2 = (x)^2$$

$$\frac{x+6 = x^2}{-x-6 \quad -x-6}$$

$$0 = x^2 - x - 6$$

$$0 = (x+2)(x-3)$$

$$\begin{array}{l} x+2=0 \quad \text{or} \quad x-3=0 \\ -2-2 \quad \quad \quad +3+3 \end{array}$$

$$\underline{\underline{x = -2 \quad \text{or} \quad x = 3}}$$

Baseball Problem

2 Pyth^m Problems
 Correct spelling

$$\rightarrow (leg_1)^2 + (leg_2)^2 = (hyp.)^2$$

2 Distance Problems

1. 3pts - Rt Δ ?