Review for Ch. 12 Test

May 24, 2007

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

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

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

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

$6\sqrt{3}$

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

$= 15$

$$\begin{array}{r} 2 \\ 45 \\ \hline 5 \\ \hline 225 \end{array}$$

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

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

$5 \cdot 3 = 15$

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

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

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

$$= -1$$

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

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

Determine if the three points make a right triagle

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

$d=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

$=\sqrt{(\ -\ )^2+(\ -\ )^2}$

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

$=\sqrt{\ \ +\ \ }$

$=\sqrt{\ \ }$

$d=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

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

$=\sqrt{\ \ +\ \ }$

$=\sqrt{\ \ }$

$(\text{leg}_1)^2+(\text{leg}_2)^2=(\text{hyp})^2$

$(\ \ \ )^2+(\ \ \ )^2 \stackrel{?}{=} (\ \ \ )^2$

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

$-5 \quad -5$

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

$x-3=49$

$+3 \quad +3$

$x=52$

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

$x+6=x^2$

$-x \quad -6 \qquad -x-6$

$0=x^2-x-6$ (1·6, 2·3)

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

$x+2=0$ or $x-3=0$

$-2 \quad -2 \qquad +3 \quad +3$

$x=-2$ or $x=3$

Baseball Problem

2 PythThm Problems → $(leg_1)^2+(leg_2)^2=(hyp.)^2$

Correct spelling

2 Distance Problems

1. 3pts - Rt Δ?