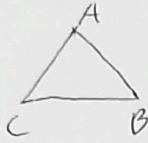


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نام و نام خانوادگی پاسبان پاسخنانه تشریحی تکلیف شماره کلاس

$$A = 61^\circ$$



$$\frac{2}{\sqrt{2}} = \frac{2\sqrt{2}}{\sin B} \rightarrow \sin B = \frac{\sqrt{2}}{2} \Rightarrow B = 45^\circ$$

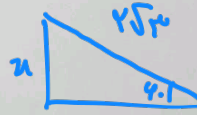
$$C = 180^\circ - A - B = 74^\circ$$

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$$\frac{AC}{\frac{\sqrt{2}}{2}} = \frac{2\sqrt{2}}{\frac{\sqrt{2}}{2}} \rightarrow AC = 2\sqrt{2}$$

$$\tan 45^\circ = \frac{x}{\sqrt{2}} = \frac{x}{2\sqrt{2}} \rightarrow x = 2$$



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$$\frac{\sin C}{c} = \frac{\sin B}{b} \Rightarrow \frac{\sin 74^\circ}{c} = \frac{\sin 45^\circ}{2} \Rightarrow c = 2.5$$

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$$1^2 = 2^2 + 2^2 - 2(2)(2)\cos B \rightarrow \cos B = 0.1$$

$$\sin^2 B = 1 - \cos^2 B = 1 - 0.01 = 0.99 \Rightarrow \sin B = \sqrt{0.99} = 0.995$$

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$$a^2 = (2(1+\sqrt{2}))^2 + 2^2 - 2(2(1+\sqrt{2}))(2)\cos 45^\circ \rightarrow a = 2\sqrt{2}$$

$$\frac{\sqrt{2}}{\frac{\sqrt{2}}{2}} = \frac{2}{\sin B} \rightarrow \sin B = \frac{\sqrt{2}}{2} \Rightarrow B = 45^\circ$$

$$C = 180^\circ - A - B = 74^\circ$$

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$$r^2 = r^2 + r^2 - 2(r)(r) \cos \alpha \rightarrow \cos \alpha = \frac{1}{2}$$

$$x^2 = e^2 + f^2 - 2(e)(f) \times \frac{1}{2} \rightarrow x = \sqrt{e^2 - ef}$$

6

$$\text{اذا } x^2 = a^2 + d^2 - 2(a)(d) \times \frac{1}{2} \rightarrow x = \sqrt{a^2 - ad}$$

$$\therefore \frac{1}{2} (8)(12) \frac{\sqrt{5}}{5} = 8 = 1 \cdot \sqrt{5}$$

7

$$\frac{b^2 + c^2 + 2bc \cos A}{bc(\cos A + 1)} = \frac{b^2 + c^2 + 2bc - b^2 - c^2 + 2bc \cos A}{bc(\cos A + 1)} = \frac{2bc(\cos A + 1)}{bc(\cos A + 1)}$$

✓

8

$$\cancel{a} + b^2 - \cancel{c^2} = \cancel{a} + a^2 - b^2 - a^2 - c^2 \rightarrow \frac{b^2 - c^2}{b - c} = a^2 \rightarrow \frac{(b - c)(b + c + bc)}{b - c} = a^2$$

1, 10

$$b^2 + c^2 + bc = a^2$$

$$\hat{\alpha} = 120^\circ$$

$$b^2 + c^2 + 2bc \cos \alpha = a^2 \Rightarrow 2 \cos \alpha = -1 \rightarrow \cos \alpha = -\frac{1}{2}$$

9

$$r = \frac{1}{2} (R - \cos \theta) (1 + R \cos \theta) \frac{1}{r} \rightarrow \cos \theta = \left\{ \frac{1}{R} \right\}$$

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$$a^2 = r^2 + v^2 - 2(r)(v) \frac{\sqrt{2}}{2} \rightarrow a^2 = d^2 - 1 \cdot \sqrt{2}$$

$$\begin{aligned} n-1 &= 2 \\ n+1 &= 2 \end{aligned}$$

$$r^2 + r^2 - e(r)(r) \times \frac{\sqrt{2}}{2} = r^2 - 1 \cdot \sqrt{2}$$

$$a^2 = r^2 - 1 \cdot \sqrt{2}$$