



Math worksheet on 'Pythagorean Equation from Variables - Length of Side (Radical) (Level 1)'. Part of a broader unit on 'Pythagoras - Foundations'

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1 Find the radical (square root) for the value of 'a' in this equation

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

$$a = ?$$

$$b = 4$$

$$c = 5$$

a $a = \sqrt{59}$	b $a = \sqrt{41}$
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c $a = \sqrt{9}$	d $a = \sqrt{34}$
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2 Find the radical (square root) for the value of 'a' in this equation

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

$$a = ?$$

$$b = 5$$

$$c = 7$$

a $a = \sqrt{73}$	b $a = \sqrt{24}$
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c $a = \sqrt{122}$	d $a = \sqrt{123}$
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3 Find the radical (square root) for the value of 'a' in this equation

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

$$a = ?$$

$$b = 3$$

$$c = 6$$

a $a = \sqrt{27}$	b $a = \sqrt{99}$
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c $a = \sqrt{63}$	d $a = \sqrt{117}$
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4 Find the radical (square root) for the value of 'b' in this equation

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

$$a = 2$$

$$b = ?$$

$$c = 7$$

a $b = \sqrt{94}$	b $b = \sqrt{53}$
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c $b = \sqrt{45}$	d $b = \sqrt{143}$
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5 Find the radical (square root) for the value of 'b' in this equation

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

$$a = 3$$

$$b = ?$$

$$c = 6$$

a $b = \sqrt{81}$	b $b = \sqrt{27}$	c $b = \sqrt{99}$
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d $b = \sqrt{63}$		
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6 Find the radical (square root) for the value of 'b' in this equation

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

$$a = 2$$

$$b = ?$$

$$c = 4$$

a $b = \sqrt{28}$	b $b = \sqrt{12}$	c $b = \sqrt{44}$
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d $b = \sqrt{52}$		
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7 Find the radical (square root) for the value of 'b' in this equation

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

$$a = 5$$

$$b = ?$$

$$c = 9$$

a $b = \sqrt{106}$	b $b = \sqrt{218}$
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c $b = \sqrt{137}$	d $b = \sqrt{56}$
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