Name Key Geometry Quiz 9 1-3 Review Period

Do the following form a right triangle and do they form a Pythagorean triple?

1. 5,12,13

$169 = 169$

Yes, Yes

2. 11,60,62

$3721 \neq 3844$

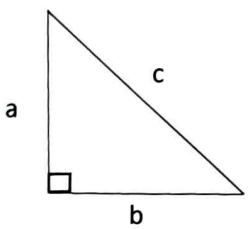
NO NO

3. $\frac{4\sqrt{3}}{7}, \frac{9\sqrt{2}}{7}, \frac{10\sqrt{2}}{7}$

$\frac{48}{49} + \frac{162}{49} = \frac{200}{49}$

No, NO

Find the missing side of the following right triangles. Leave as a square root.



4. a=6 b=12

$6^2 + 12^2 = c^2$

$\sqrt{180} = \sqrt{c^2}$

$\sqrt{9} \cdot \sqrt{20}$

$3 \cdot \sqrt{4} \cdot \sqrt{5}$

$6\sqrt{5}$

5. a=8 c=14

$8^2 + b^2 = 14^2$

$\sqrt{b^2} = \sqrt{132}$

$b = \sqrt{4} \cdot \sqrt{33}$

$2\sqrt{33}$

6. a=16 c= 20

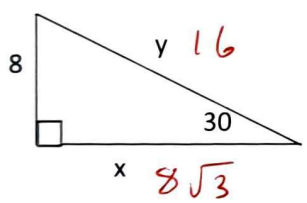
$16^2 + b^2 = 20^2$

$\sqrt{b^2} = \sqrt{144}$

$b = 12$

Find x and y. Leave as square roots.

7.



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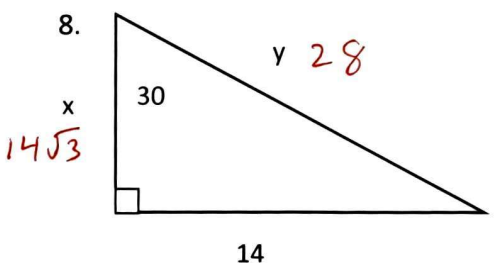
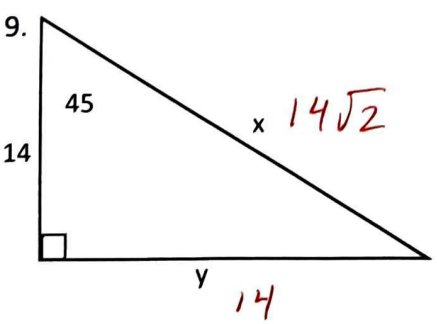


9.



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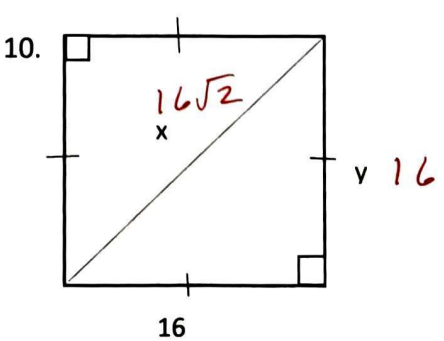

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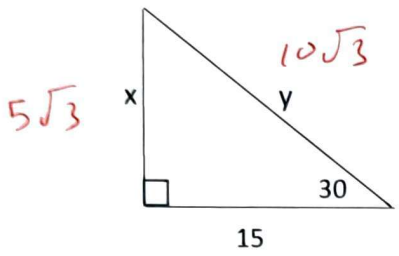
11.



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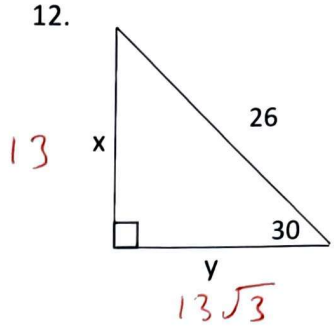

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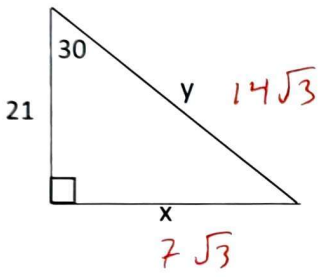

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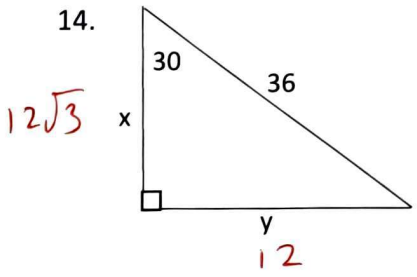
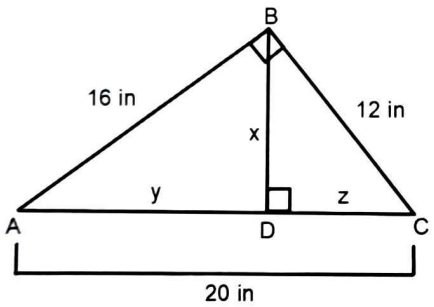


15. State the similarity statement and then find x, y, and z. Round to two decimals.



Statement: $\Delta ABC \sim$

X= 9.6

Y= 12.8 in

Z= 7.2 in

$\frac{16^2}{20} = \frac{20y}{20}$

$12.8 = y$

$20 - 12.8 = z = 7.2$

$x^2 = 12.8 \cdot 7.2$

$\sqrt{x^2} = \sqrt{92.16}$

$x = 9.6$