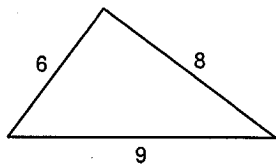


The Pythagorean Theorem

Do the following lengths form a right triangle?

1)



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

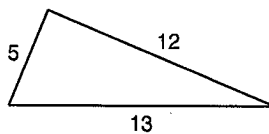
$$6^2 + 8^2 = 9^2$$

$$36 + 64 = 81$$

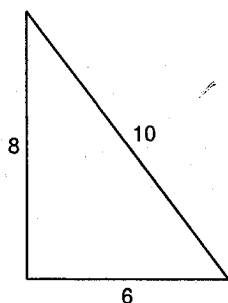
$$100 \neq 81$$

NO,
not a right A.

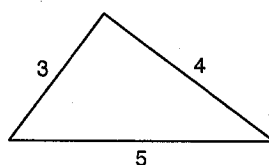
2)



3)



4)

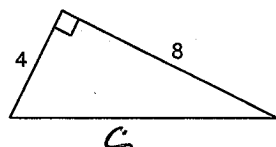


5) $a = 6.4, b = 12, c = 12.2$

6) $a = 2.1, b = 7.2, c = 7.5$

Find each missing length to the nearest tenth.

7)



$$4^2 + 8^2 = c^2$$

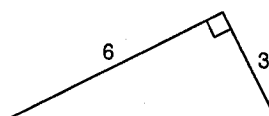
$$16 + 64 = c^2$$

$$\sqrt{80} = \sqrt{c^2}$$

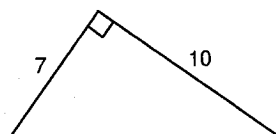
$$\sqrt{160} = c$$

$$4\sqrt{5} = c$$

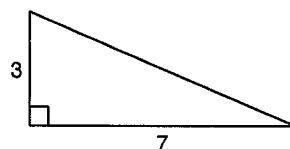
8)



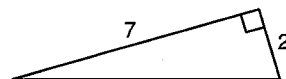
9)



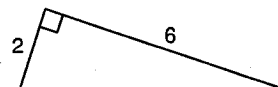
10)



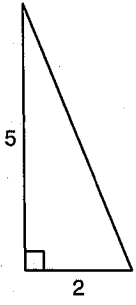
11)



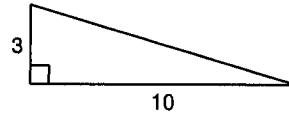
12)



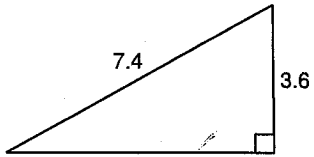
13)



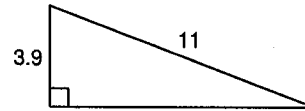
14)



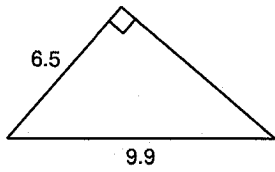
15)



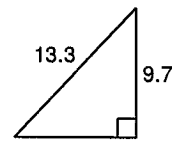
16)



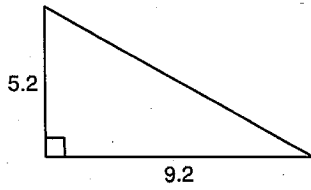
17)



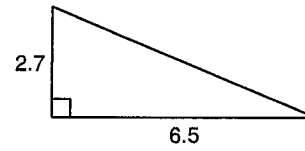
18)



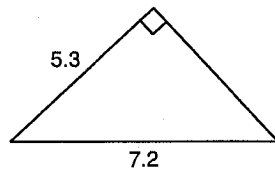
19)



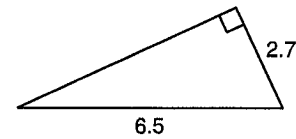
20)



21)



22)



Using the Distributive Property

Simplify each expression.

1) $-6(a + 8)$

2) $4(1 + 9x)$

3) $6(-5n + 7)$

4) $(9m + 10) \cdot 2$

5) $(-4 - 3n) \cdot -8$

6) $8(-b - 4)$

7) $(1 - 7n) \cdot 5$

8) $-6(x + 4)$

9) $5(3m - 6)$

10) $(-6p + 7) \cdot -4$

11) $5(b - 1)$

12) $(x + 9) \cdot 5$

$$13) -4(-8x - 8)$$

$$14) -6(7 + x)$$

$$15) -3(x - 5)$$

$$16) -5(10x + 1)$$

$$17) (1 + 2v) \cdot 5$$

$$18) -8(1 - 5x)$$

$$19) -7(5k - 4)$$

$$20) -5(7a - 6)$$

$$21) 5(n + 6)$$

$$22) 4(3r - 8)$$

$$23) 3(5 + 5x)$$

$$24) (1 + 9x) \cdot -10$$