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Date _____

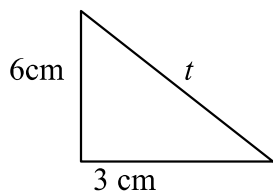
Ms. Kresovic's Geometry period _____

Extra Practice with the Pythagorean Theorem

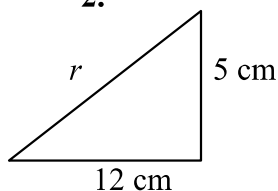
Find the EXACT length of the missing side in the following examples.

Show all work (here or on a separate piece of loose leaf)!

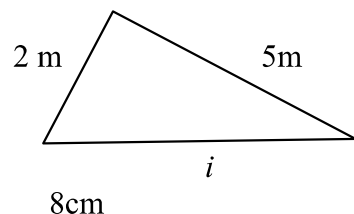
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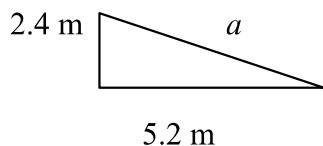
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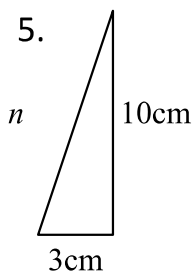
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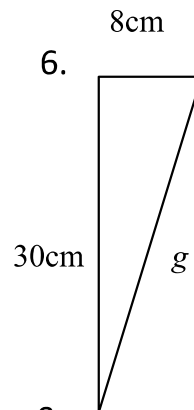
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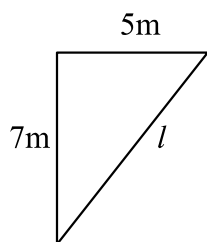
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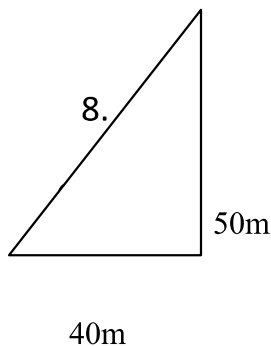
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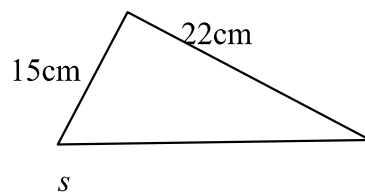
7.



8.



9.



What is the EXACT length of the hypotenuse, c , of the following right angle triangles? **Show all work!**

10. $a = 3$; $b = 4$; $c = ?$

15. $a = 8$; $b = 10$; $c = ?$

11. $a = 6$; $b = 8$; $c = ?$

16. $a = 15$; $b = 17$; $c = ?$

12. $a = 12$; $b = 5$; $c = ?$

17. $a = 40$; $b = 50$; $c = ?$

13. $a = 9$; $b = 12$; $c = ?$

18. $a = 4$; $b = 2$; $c = ?$

14. $a = 15$; $b = 20$; $c = ?$

19. $a = 1.2$; $b = 3.5$; $c = ?$

20. A ladder is leaning against the side of a 10m house. If the base of the ladder is 3m away from the house, how tall is the ladder? **Please draw a diagram and show all work.**

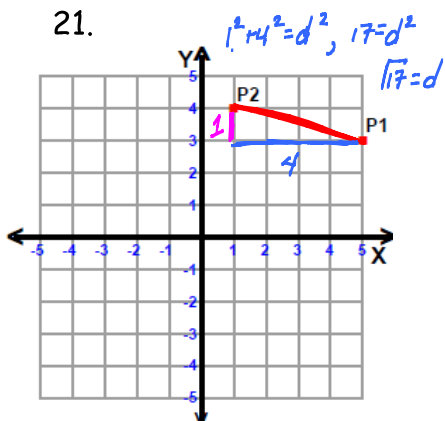
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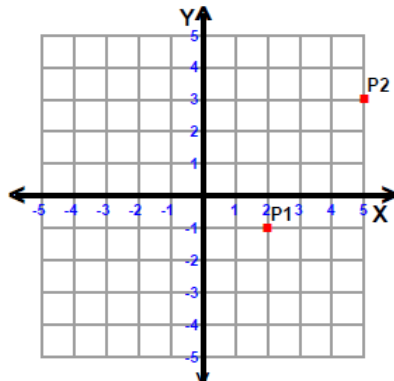
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Find the exact distance between the given points.

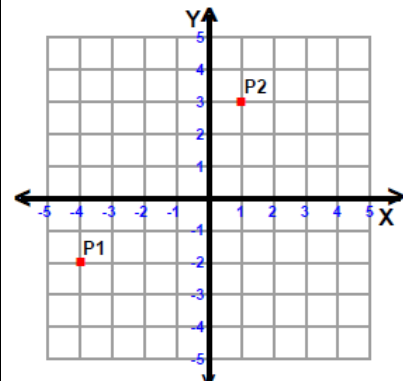
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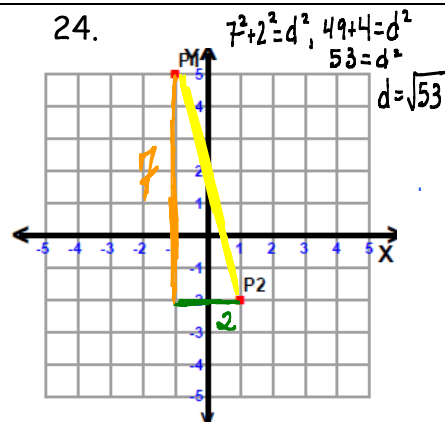
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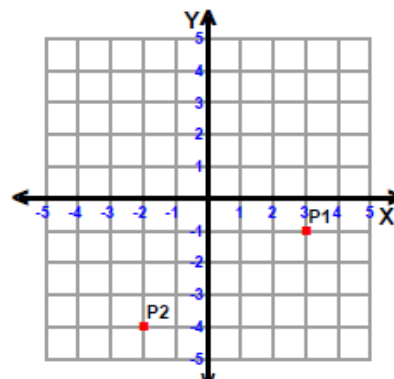
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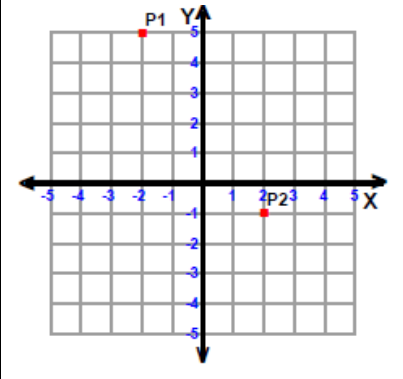
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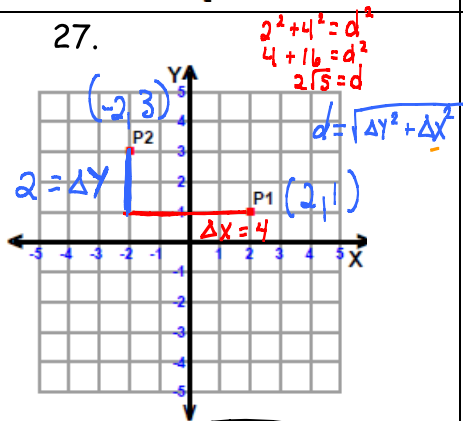
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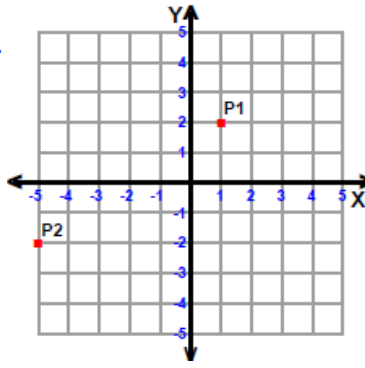
26.



27.



28.



29. $P_1 = (-5, 10)$,
 $P_2 = (-12, 9)$

30. $P_1 = (8, 4)$, $P_2 = (5, 5)$

$$d = \sqrt{(\Delta x)^2 + (\Delta y)^2}$$

$$d = \sqrt{(3^2 + 1^2)}$$

$$d = \sqrt{10}$$

31. $P_1 = (5, 8)$, $P_2 = (-3, 1)$

32. $P_1 = (10, -1)$,
 $P_2 = (10, -8)$

$$\sqrt{\Delta x^2 + \Delta y^2} = d$$

$$\sqrt{0^2 + 7^2} = d^2$$

$$7 = d$$

