

Practice Answers 11.2.notebook

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

1)
 $6.9 + 9.8 = 16.7$
 All RADII = 13.5 measure
 $x = 33.4$

2)
 $5.7 + 6.4 = 12.1$
 $x = 12.1$

3)
 $a^2 + b^2 = c^2$
 $x^2 + 15.1^2 = 16.5^2$
 $x^2 = 44.24$
 $x = 6.6513$
 $x \approx 6.7$

4)
 $a^2 + b^2 = c^2$
 $x^2 + 14.8^2 = 18.3^2$
 $x^2 = 115.85$
 $x = 10.763$
 $x \approx 10.8$

9)
 $y^2 + 16.4^2 = 19.4^2$
 $y^2 = 123.08$
 $y = 11.094$
 $x + 11.1 = 19.4$
 $x = 8.7$

10)
 $y^2 + 18.2^2 = 19.4^2$
 $y^2 = 45.12$
 $y = 6.717...$
 $y \approx 6.7$
 $x + y = 19.4$
 $x + 6.7 = 19.4$
 $x = 12.7$

5)
 $y^2 + 12.8^2 = 14^2$
 $y^2 = 32.16$
 $y = 5.67$
 $x + y = 14$
 $x + 5.67 = 14$
 $x = 8.329$
 $x \approx 8.3$

6)
 $y^2 + 11^2 = 14.4^2$
 $y^2 = 86.36$
 $y = 9.29$
 $x + y = 14.4$
 $x + 9.29 = 14.4$
 $x = 5.106$
 $x \approx 5.1$

11)
 $5x - 14 = 3x - 4$
 $x = 5$

12)
 $4x - 50 = 3x + 10$
 $x = 60$

13)
 $x^2 + x^2 = (x+56)^2$

7)
 $y^2 + 14.7^2 = 16.3^2$
 $y^2 = 49.6$
 $y = 7.0427$
 $y \approx 7.0$
 $x + y = 16.3$
 $x + 7.0 = 16.3$
 $x = 9.3$

8)
 $y^2 + 15.3^2 = 18.1^2$
 $y^2 = 93.52$
 $y = 9.67$
 $18.1 - 9.67 = 8.4$
 $x = 8.4$

14) Solve for x and y! (Hint: Use substitution!)

 $x = 5y - 29$
 $2x = 12$
 $x = 6$
 $6 = 5y - 29$
 $35 = 5y$
 $7 = y$

15) Find the measure of $\angle EC$

 $\theta = \tan^{-1}(\frac{11}{7})$
 $\theta = 57.5$
 $\angle EC = 115.1$
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