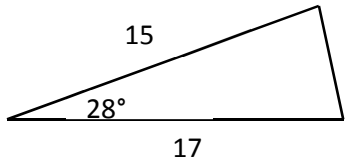
Unit 6: Triangle Geometry Day 7

Math 9 Principles

6-5 I can determine the area of a triangle using the formula $\boldsymbol{A = \frac{1}{2}ab\sin C}$.

Find the area for each triangle.

1)



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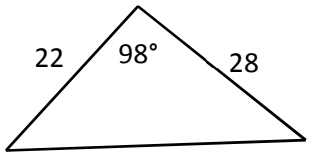

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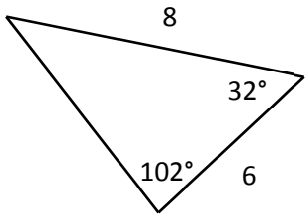

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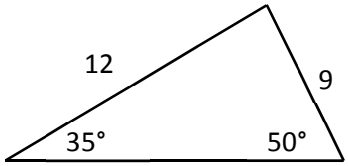

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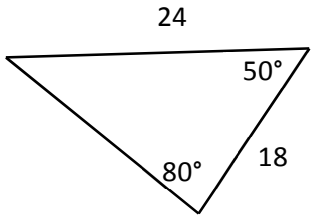

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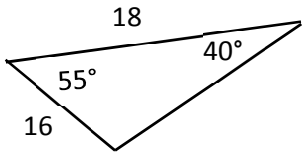

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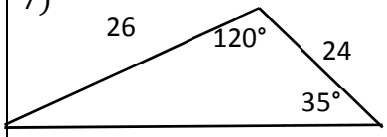

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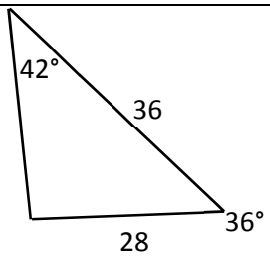

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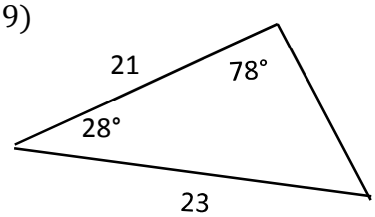
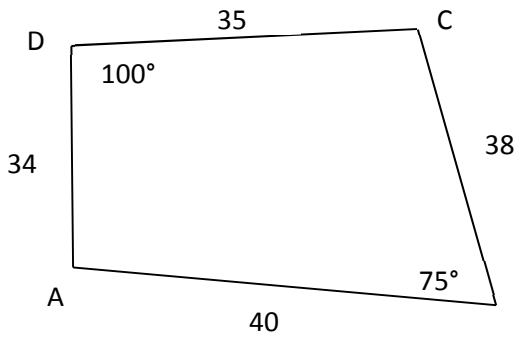


Solve each question. Round all answers to the nearest tenth.

10) Find the area of quadrilateral ABCD.

Hint: Divide it into 2 triangles.



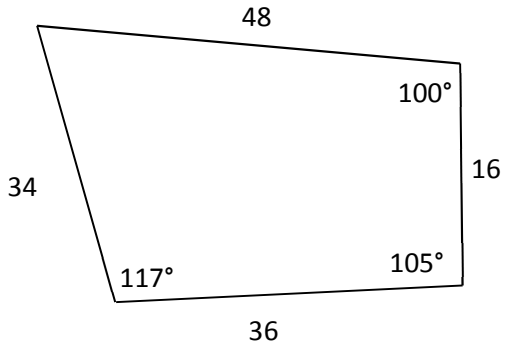
11) Find the area of an equilateral triangle with side lengths of 10.

12) 3. Find the area of a parallelogram with sides of length 32 and 15 and one corner angle of 115°.

HINT: Sketch it and divide it into 2 triangles.

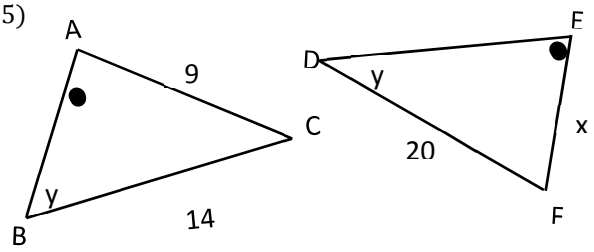
13) An isosceles triangle has a base length of 15. Its other two sides are 24 units long. Its base angles are 72°**.** Find the area.

14) Find the area of quadrilateral ABCD.



C. Find the length of the indicated side in each pair of similar triangles.

15)



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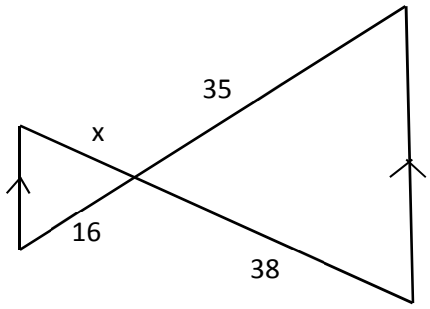

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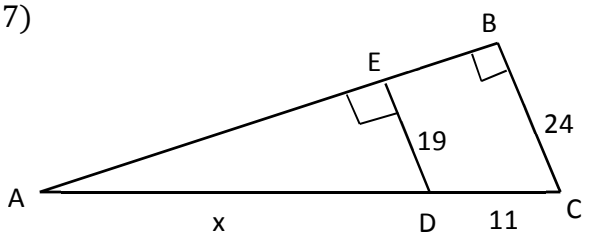

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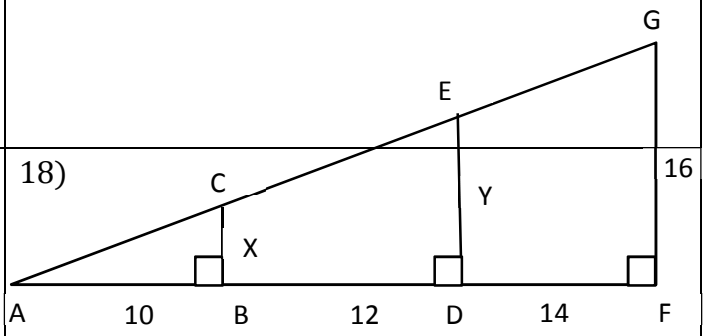
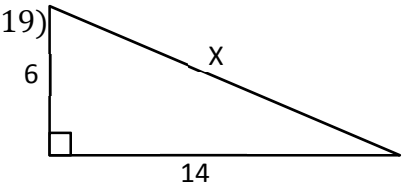


E. Use the Pythagorean Theorem to calculate the length of the missing side. Round your answer to the nearest tenth.

19)



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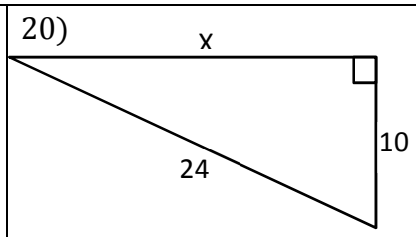

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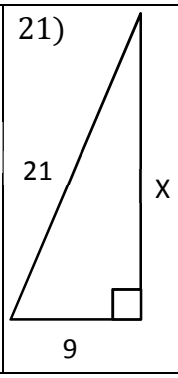
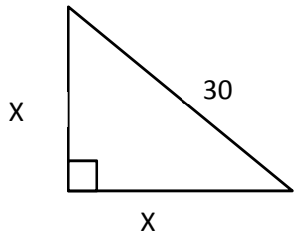


22) Find the length of the legs of the right, isosceles triangles shown.



23) From point A, travel 6 km east, turn south and travel 4 km, and then turn east and travel 10 km to point B. Find the shortest distance between A and B.

24) From point A, travel 10 km south, turn east and travel 14 km, and then turn north and travel 3 km to point B. Find the shortest distance between A and B.