CHAPTER 12 AND 7.5

REVIEW

12.5 Scale Drawings

You should be able to...

- ❑ **use scale drawings to find actual distances.**
- ❑ **find scale factors.**
- ❑ **use drawings to find actual perimeters and areas.**
- ❑ **recreate scale drawings at a different scale.**

Vocabulary:

- scale drawing
- scale model
- scale
- scale factor

12.4 Quadrilaterals

You should be able to...

- ❑ **classify a quadrilateral based on its properties.**
- ❑ **understand that the sum of the angle measures in any quadrilateral is 360º.**
- ❑ **find missing angle measures in quadrilaterals.**
- ❑ **construct a quadrilateral given the type, angle measures, and /or side lengths.**

Vocabulary:

- *quadrilateral, trapezoid, kite, parallelogram, rectangle, rhombus, square*

Key Idea:

- *Sum of the Angle Measures in a Quadrilateral*

12.4 Quadrilaterals

You should be able to...

- ❑ **classify a quadrilateral based on its properties.**
- ❑ **understand that the sum of the angle measures in any quadrilateral is 360º.**
- ❑ **find missing angle measures in quadrilaterals.**
- ❑ **construct a quadrilateral given the type, angle measures, and /or side lengths.**

Vocabulary:

- *quadrilateral, trapezoid, kite, parallelogram, rectangle, rhombus, square*

Key Idea:

- *Sum of the Angle Measures in a Quadrilateral*

7.5 Using the Pythagorean Theorem

You should be able to...

- ❑ **use the converse of the Pythagorean Theorem to identify right triangles.**
- ❑ **use the Pythagorean Theorem to find distance in a coordinate plane.**
- ❑ **solve real-life problems.**

Key Concepts:

• Converse of the Pythagorean Theorem

• Distance Formula

12.3 Triangles

You should be able to...

- ❑ **classify triangles using angles and sides.**
- ❑ **construct triangles with given angle measures.**
- ❑ **construct triangles with given side lengths.**

Vocabulary:

- acute triangle, obtuse triangle, right triangle, equiangular triangle
- scalene triangle, isosceles triangle, equilateral triangle

12.2 Complementary & Supplementary Angles

You should be able to...

- ❑ **classify pairs of angles as complementary, supplementary, or neither.**
- ❑ **find angle measures using complementary or supplementary angles.**

Vocabulary:

- complementary angles
- supplementary angles

12.1 Adjacent & Vertical Angles

You should be able to...

- ❑ **identify adjacent and vertical angles.**
- ❑ **find angle measures using adjacent and vertical angles.**
- ❑ **draw an angle with a certain measure using a protractor.**

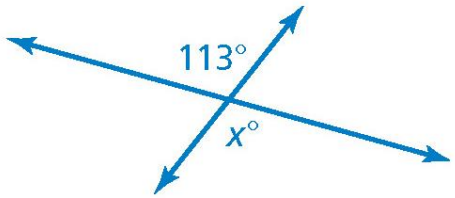
Vocabulary:

- adjacent angles
- vertical angles

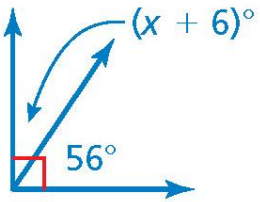
Practice

Tell whether the angles are *adjacent* or *vertical*. Then find the value of *x*.

1.



2.



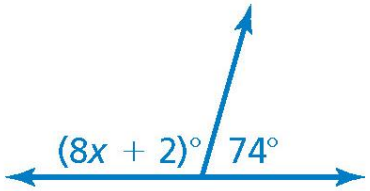
1. vertical; 113

2. adjacent; 28

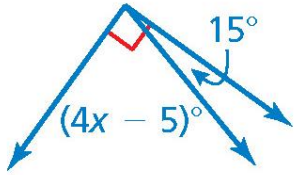
Practice

Tell whether the angles are *complementary* or *supplementary*. Then find the value of *x*.

3.



4.



Practice – DO THESE IN YOUR NOTEBOOKS!!!

Draw a triangle with the given angle measures. Then classify the triangle.

5. 10°, 80°, 90°

6. 30°, 40°, 110°

Draw a triangle with the given description.

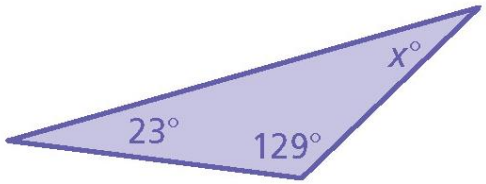
7. a triangle with a 5-inch side and a 6-inch side that meet at a 50° angle

8. a right isosceles triangle

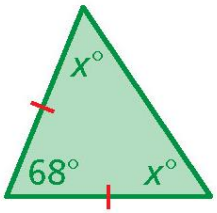
Practice

Find the value of x. Then classify the triangle.

9.



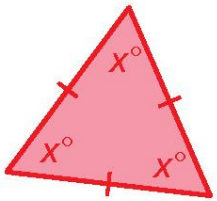
10.



Practice

Find the value of x. Then classify the triangle.

11.

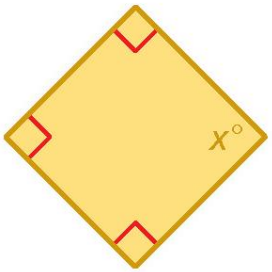


11. 60; equilateral equiangular triangle

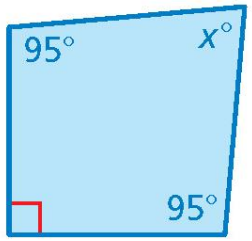
Practice

Find the value of x.

12.



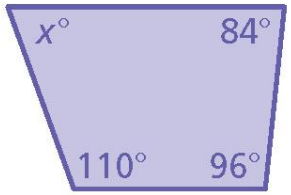
13.



Practice

Find the value of x.

14.



Practice – DO THESE IN YOUR NOTEBOOKS!!!

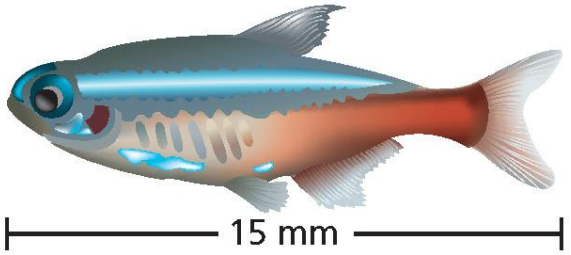
Draw a quadrilateral with the given description.

15. a rhombus with 6-centimeter sides and two 80° angles

16. a parallelogram with a 20° angle and a 160° angle

Practice

17. **FISH** Use a centimeter ruler to measure the fish. Find the scale factor of the drawing.



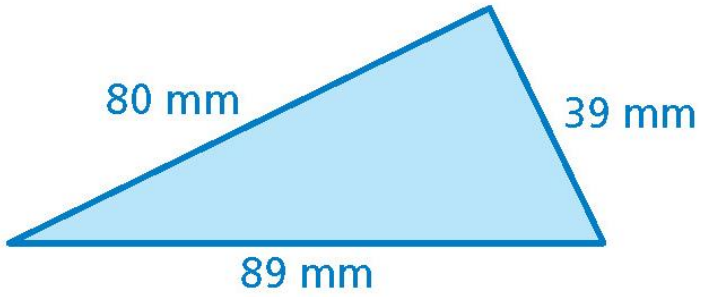
5 cm

Practice

18. **CAD** An engineer is using computer-aided design (CAD) software to design a component for a space shuttle. The scale of the drawing is 1 cm : 60 in. The actual length of the component is 12.5 feet. What is the length of the component in the drawing?

Practice

18. Tell whether the triangle is a right triangle



Practice

Find the distance between the two points.

19. $(-2, 3), (6, 9)$