

Study Guide: Review

Vocabulary

acute angle	411	line symmetry	457	right angle	411
acute triangle	429	obtuse angle	411	right triangle	429
adjacent angles	416	obtuse triangle	429	rotation	453
angle	410	parallel lines	420	rotational symmetry	458
complementary angles	417	parallelogram	434	scalene triangle	430
congruent angles	416	perpendicular lines	420	skew lines	420
congruent figures	450	plane	406	square	434
congruent line segments	430	point	406	straight angle	411
diagonal	438	polygon	438	supplementary angles	417
equilateral triangle	430	quadrilateral	434	transformation	453
isosceles triangle	430	ray	407	translation	453
line	406	rectangle	434	trapezoid	434
line of reflection	453	reflection	453	vertex	410
line of symmetry	457	regular polygon	438	vertical angles	416
line segment	407	rhombus	434		

Complete the sentences below with vocabulary words from the list above.

1. A quadrilateral with exactly two parallel sides is called a(n) _____.
2. A(n) _____ is a closed plane figure formed by three or more line segments.

EXAMPLES

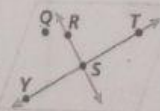
EXERCISES

8-1 Building Blocks of Geometry (pp. 406–409)

- Use the diagram.

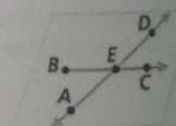
Name a line. $\overleftrightarrow{RS}$

Name a line segment. $\overline{ST}$



Use the diagram.

3. Name two lines.
4. Name a ray.



8-2 Measuring and Classifying Angles (pp. 410–413)

- Classify each angle as acute, right, obtuse, or straight.

$$m\angle A = 80^\circ$$

$80^\circ < 90^\circ$, so $\angle A$ is acute.

Classify each angle as acute, right, obtuse, or straight.

$$5. m\angle x = 60^\circ$$

$$7. m\angle x = 45^\circ$$

$$6. m\angle x = 100^\circ$$

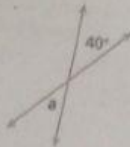
$$8. m\angle x = 180^\circ$$

EXAMPLES

8-3 Angle Relationships (pp. 416–419)

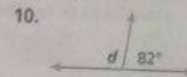
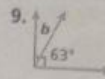
- Find the unknown angle measure.

$m\angle a = 40^\circ$ Vertical angles are congruent.



EXERCISES

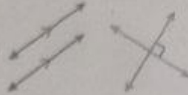
Find each unknown angle measure.



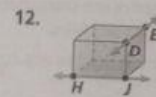
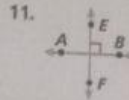
8-4 Classifying Pairs of Lines (pp. 420–423)

- Classify each pair of lines.

The red lines are parallel.
The blue lines are perpendicular.



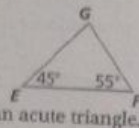
Classify each pair of lines.



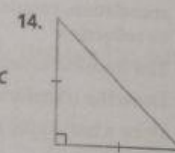
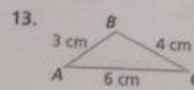
8-5 Triangles (pp. 429–432)

- Classify the triangle using the given information.

$m\angle G + 45^\circ + 55^\circ = 180^\circ$
 $m\angle G = 80^\circ$, so $\triangle EFG$ is an acute triangle.

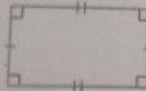


Classify the triangle using the given information.



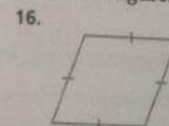
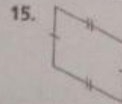
8-6 Quadrilaterals (pp. 434–437)

- Give the most exact name for the figure.



The most exact name is rectangle.

Give the most exact name for the figure.

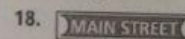


8-7 Polygons (pp. 438–441)

- Name the polygon and tell whether it appears to be regular or not regular.
It is a regular octagon.



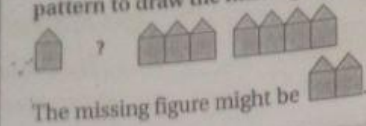
Name each polygon and tell whether it appears to be regular or not regular.



EXAMPLES

8-8 Geometric Patterns (pp. 444–447)

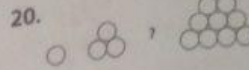
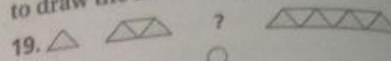
- Identify a possible pattern. Use the pattern to draw the missing figure.



The missing figure might be

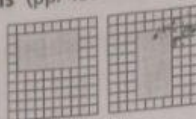
EXERCISES

Identify a possible pattern. Use the pattern to draw the missing figure.



8-9 Congruent Polygons (pp. 450–452)

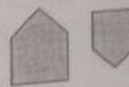
- Decide whether the figures are congruent. If not, explain.



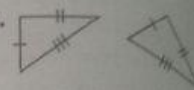
These figures are congruent.

Decide whether the figures in each pair are congruent. If not, explain.

21.

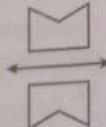


22.



8-10 Transformations (pp. 453–456)

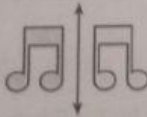
- Tell whether the transformation is a translation, rotation, or reflection.



The transformation is a reflection.

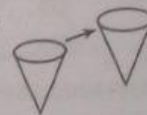
- Draw the transformation.

Draw a horizontal reflection.



Tell whether the transformation is a translation, rotation, or reflection.

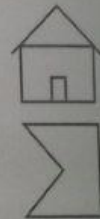
23.



Draw each transformation.

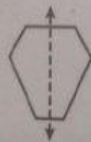
24. Draw a translation.

25. Draw a 90° clockwise rotation about the point.



8-11 Symmetry (pp. 457–461)

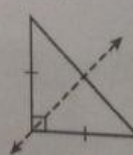
- Determine whether the dashed line appears to be a line of symmetry. Does the figure have rotational symmetry?



The line appears to be a line of symmetry. The figure does not have rotational symmetry.

Determine whether the dashed line appears to be a line of symmetry. Then tell whether the figure has rotational symmetry.

26.



27.

