Geometric Figures: Skill 5 - 20E

Classify Quadrilaterals

A quadrilateral is a polygon with 4 sides and 4 angles. There are five types of quadrilaterals that are covered in this worksheet.

| Rectangle	Square	Rhombus	Parallelogram	Trapezoid
2 pairs of congruent sides 4 right angles	4 congruent sides 4 congruent angles	4 congruent sides 2 pairs of congruent angles	2 pairs of parallel sides opposite sides are congruent	1 pair of parallel sides

Directions: Classify each in as many ways as possible. Write quadrilateral, parallelogram, rhombus, rectangle, square, or trapezoid. The first problem is completed for you.
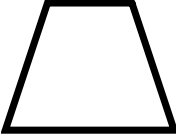
1.

quadrilateral

parallelogram

square

2.

_____

_____

_____

3.

_____

_____

_____

4.

_____

_____

_____
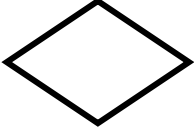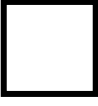
5.

_____

_____
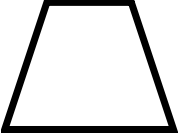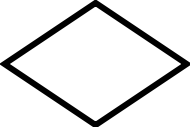
6.

_____

_____

_____

7.

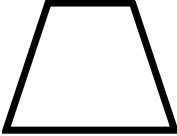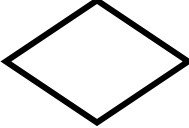_____

_____

_____

8.

_____

_____

_____
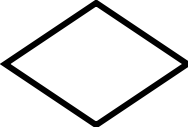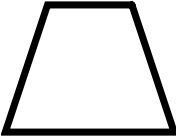
Geometric Figures: Skill 5 - 20E

Classify Quadrilaterals

Directions: Classify each in as many ways as possible. Write quadrilateral, parallelogram, rhombus, rectangle, square, or trapezoid.

9.	10.	11.	12.
		_____	
_____	_____	_____	_____
_____	_____	_____	_____

13.	14.	15.	16.
_____	_____		_____
_____	_____	_____	_____
_____	_____	_____	_____

13.	14.	15.	16.
		_____	
_____	_____	_____	_____
_____	_____	_____	_____

Geometric Figures: Skill 5 - 20E

Classify Quadrilaterals

Directions: Draw a quadrilateral that matches each description below. Then write the name of the quadrilateral. Write rectangle, square, rhombus, parallelogram or trapezoid. Write at least one name for each.

|			
17. 2 pairs of congruent sides 4 right angles	**18.** 4 congruent sides 4 congruent angles	**19.** 2 pairs of parallel sides. opposite sides are congruent	**20.** 1 pair of parallel sides
21. 4 congruent sides 2 pairs of congruent angles	**22.** 2 pairs of congruent sides 4 right angles	**23.** 4 congruent sides 4 congruent angles	**24.** 2 pairs of parallel sides. opposite sides are congruent
25. 1 pair of parallel sides	**26.** 2 pairs of parallel sides. opposite sides are congruent	**27.** 4 congruent sides 2 pairs of congruent angles	**28.** 2 pairs of congruent sides 4 right angles
29. 4 congruent sides 4 congruent angles	**30.** 2 pairs of parallel sides. opposite sides are congruent	**31.** 1 pair of parallel sides	**32.** 2 pairs of congruent sides 4 right angles

Geometric Figures: Skill 5 - 20E

Quadrilaterals: Find the Unknown Angle of a Quadrilateral.

When you add all four angles of any quadrilateral the sum is always 360⁰.

Examples

Find the sum of the measures of the angles.	Find the unknown angle.
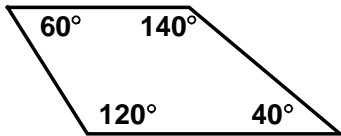
Find the unknown angle.

$110° + 90° + 90° + b = 360°$

60° 140° 120° 40°

$60⁰ + 140⁰ + 120° + 40° = 360⁰$

? 90° 110° 90°

$290° + b = 360°$

$290° - 290° + b = 360° - 290°$

$b = 70°$
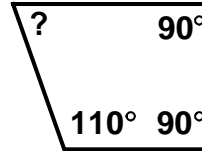
Directions: Find the unknown angle in each triangle. Use the space below each triangle to work.

33.

90° ? 80° 120°

34.

70° ? 110° ←140°

35.

90° 90° ? 130°

36.

90° ? 60° 110°

37.

? 90° 55° 90°

38.

120° 90° 110° ?

39.

120° 30° 150° ?

40.

100° ? 70° 70°

41.

? ? ? 90°
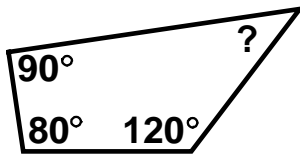
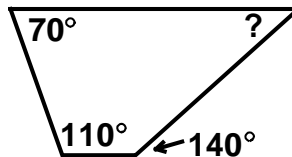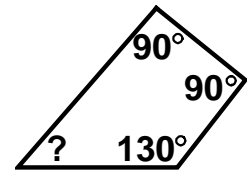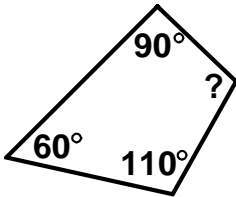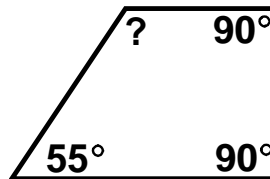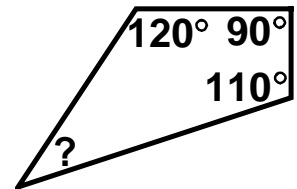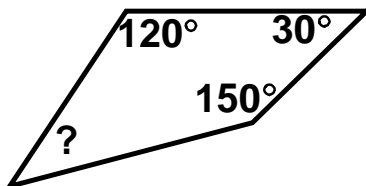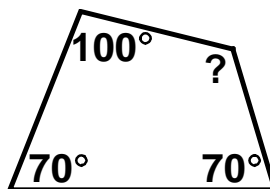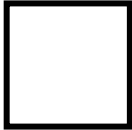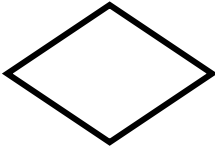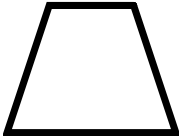# Geometric Figures: Skill 5 - 20E

Classify Quadrilaterals

Directions: Use the quadrilateral descriptions to complete the diagram.

Rectangle	Square	Rhombus	Parallelogram	Trapezoid
2 pairs of congruent sides	4 congruent sides	4 congruent sides	2 pairs of parallel sides.	1 pair of parallel sides
4 right angles	4 congruent angles	2 pairs of congruent angles	Opposite sides are congruent	

Quadrilateral ___ sides
___ angles

General

no parallel sides

Trapezoid

___ pair of parallel sides

Parallelogram

___ pairs of parallel sides

opposite sides are _____

Rhombus

___ congruent sides

___ pairs of congruent angles

Rectangle

___ pairs of congruent sides

___ right angles

Square

___ congruent sides

___ congruent angles
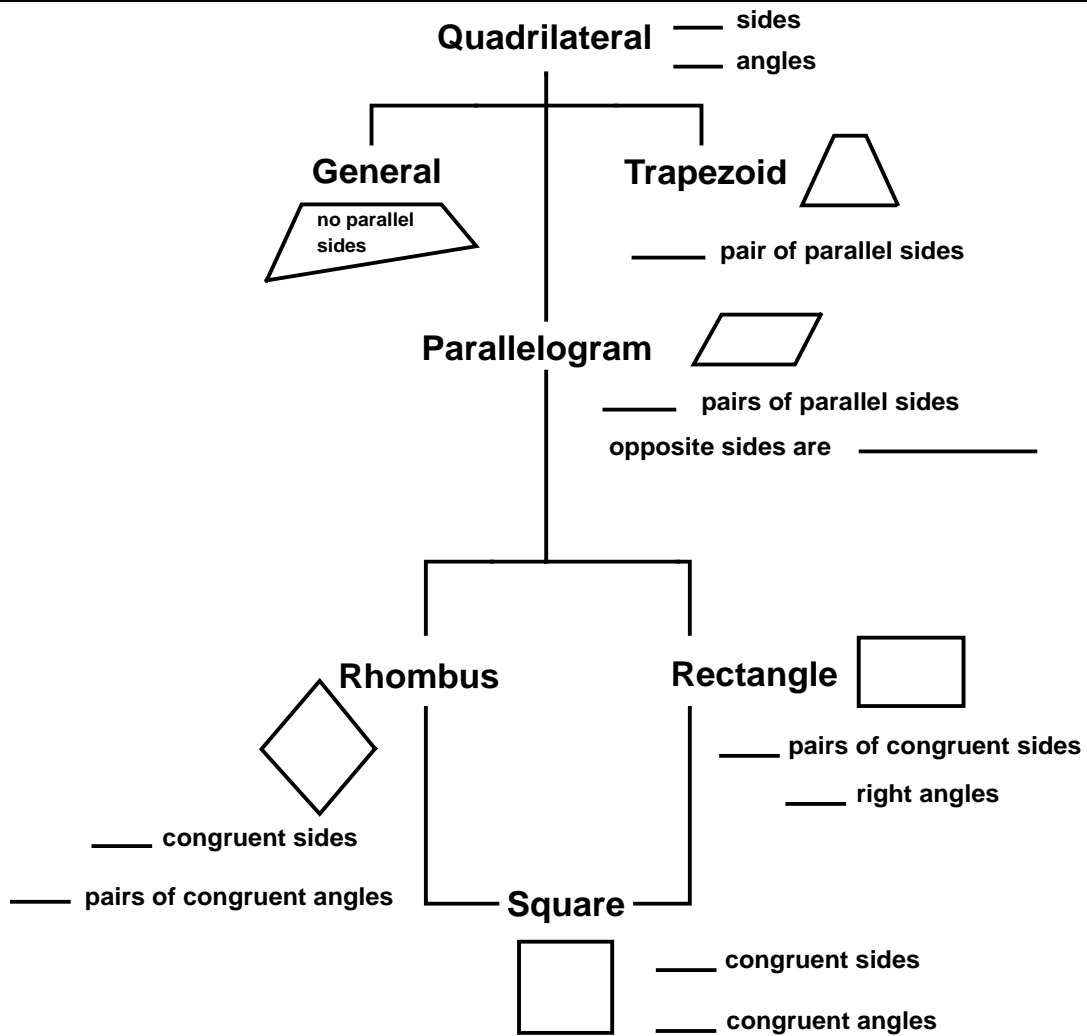
Answers: Grade 4, Skill 19E

Note: Every square is a rectangle but this is not shown in this answer sheet.

1. square parallelogram quadrilateral	2. rectangle quadrilateral parallelogram	3. parallelogram, quadrilateral	4. square parallelogram quadrilateral
5. trapezoid, quadrilateral	6. rhombus, parallelogram quadrilateral	7. rectangle, parallelogram quadrilateral	8. rhombus, parallelogram quadrilateral
9. parallelogram, quadrilateral	10. trapezoid, quadrilateral	11. rhombus, parallelogram quadrilateral	12. trapezoid, quadrilateral
13. rectangle, parallelogram quadrilateral	14. rhombus, parallelogram quadrilateral	15. parallelogram, quadrilateral	16. square parallelogram quadrilateral
17. parallelogram quadrilateral	18. square parallelogram quadrilateral	19. rhombus, parallelogram quadrilateral	20. trapezoid, quadrilateral
17. rectangle	18. square	19. parallelogram	20. trapezoid
21. rhombus	22. rectangle	23. square	24. parallelogram
25. trapezoid	26. parallelogram	27. rhombus	28. rectangle
29. square	30. parallelogram	31. trapezoid	32. rectangle
33. 70°	34. 40°	35. 50°	
36. 100°	37. 125°	38. 40°	
39. 60°	40. 120°	41. 90°, 90°, 90°	