Name: Answer Key

Chapter 8.6 Book Assignment: pg. 554-555, #1-16, 18-21, 26-28

1. isosceles trapezoid

2. 1) diagonals are perpendicular
2) 4 congruent sides
3) each diagonal bisects a pair of opp. angles

	Parallelogram	Rectangle	Rhombus	Square	Kite	Trapezoid
3. All sides are $\cong$			X	X		
4. Both pairs opp. sides $\cong$	X	X	X	X		
5. Both pairs opp. sides $\parallel$	X	X	X	X		
6. Exactly 1 pair opp $\parallel$						X
7. All $\angle$'s are $\cong$		X		X		
8. Exactly 1 pair opp $\angle$'s $\cong$					X	
9. Diagonals are $\perp$			X	X	X	
10. Diagonals are $\cong$		X		X		
11. Diagonals bisect each other	X	X	X	X		

12. having $\angle B$ and $\angle C$ be supplements does not guarantee it is a parallelogram
$\angle B \neq \angle D$ so ABCD is not a parallelogram

13. A

14. Rectangle, four right angles

15. trapezoid, there is one pair of parallel sides

16. Kite, 2 consecutive pairs of congruent sides

18. No, it could be a kite

19.

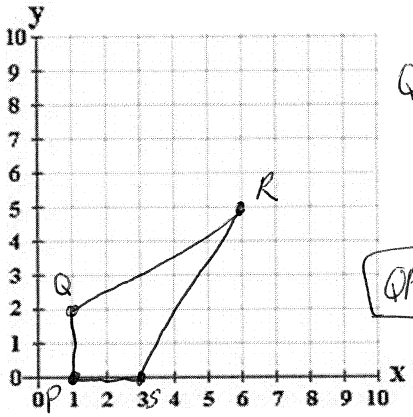
No, $m\angle F = 109°$ which is not equal to $m\angle E$

$360 = 111 + 70 + 70 + m\angle F$

20.

No, it could be a rectangle

21.



$QR = \sqrt{(1-6)^2 + (2-5)^2}$

$(-5)^2 + (-3)^2$

$\sqrt{25+9}$

$QR = \sqrt{34}$

$SR = \sqrt{(6-3)^2 + (5-0)^2}$

$= \sqrt{3^2 + 5^2}$

$= \sqrt{9+25}$

$SR = \sqrt{34}$

kite

2 consecutive $\cong$ sides

26.

$\overline{AB} \cong \overline{BC}$; all 4 sides ~~and 4 angles~~ are congruent

4 right angles

27.

$m\angle C = 120°$

$m\angle B = 60°$

then $\overline{AB} \parallel \overline{DC}$

and base $\angle$'s are $\cong$

28.

$\overline{DV} \cong \overline{BV}$

then the diagonals bisect each other