Name: _____ Hour: _____

JUSTIFICATION PRACTICE

If we know we have // lines:

// lines form _____ consecutive interior angles

// lines form _____ corresponding angles

// lines form _____ alternate Interior angles

// lines form _____ alternate Exterior angles

If we want to PROVE parallel lines:

_____ consecutive interior angles form _____

_____ corresponding angles form _____

_____ alternate interior angles form _____

_____ alternate exterior angles form _____

Other justifications:

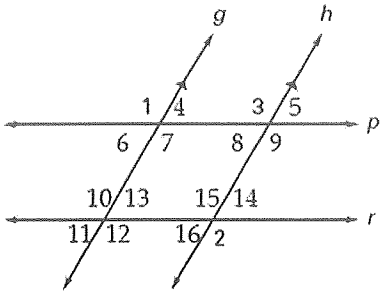
Linear pairs are _____ vertical angles are _____

Def of ⊥ Def of Compl. Def of Suppl. Def of < bisector Def of right angle CLT

angle addition Addition substitution/transitive division subtraction multiplication

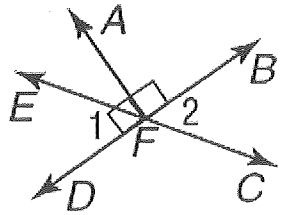
Examples:

Part A. Directions: Use the parallel justifications correctly for the figure.



1. If g//h, what justifies $\angle 3 \cong \angle 1$?
2. If g//h, what justifies $\angle 4 \cong \angle 8$?
3. If g//h, what justifies $\angle 10 \cong \angle 2$?
4. If g//h, what justifies $\angle 7 + \angle 8 = 180$?
5. If $\angle 15 \cong \angle 9$, what justifies p // r?
6. If $\angle 1 \cong \angle 12$, what justifies p // r?
7. If $\angle 6 \cong \angle 11$, what justifies p // r?
8. If $\angle 14 + \angle 9 = 180$, what justifies p // r?

Part B. Directions: Use the angle justifications correctly for the figure.



1. What justifies $\angle 1 \cong \angle 2$?
2. What justifies $\angle 1 + \angle EFA = \angle DFA$?
3. What justifies $\angle AFB = 90°$?
4. What justifies $\angle 2 + \angle DFC = 180°$?
5. What justifies $\angle EFB \cong \angle CFD$?

Part C. Directions: Use the justifications correctly for the situation.

1. What justifies $\angle 1 \cong \angle 2$, $\angle 3 \cong \angle 2$, then $\angle 1 \cong \angle 3$?
2. What justifies $3x = 15$, then $x = 5$?
3. What justifies $x + 10 = 15$, then $x = 5$?
4. What justifies $x - 10 = 15$, then $x = 25$
5. What justifies $\frac{1}{2} x = 15$, then $x = 30$?
6. What justifies $2x + 7x + 10 = 3$, then $9x + 10 = 3$?

Name: Key Hour: _____

JUSTIFICATION PRACTICE

If we know we have // lines:

// lines form Suppl. consecutive interior angles

// lines form ≅ corresponding angles

// lines form ≅ alternate Interior angles

// lines form ≅ alternate Exterior angles

If we want to PROVE parallel lines:

Suppl. consecutive interior angles form // lines

≅ corresponding angles form // lines

≅ alternate interior angles form // lines

≅ alternate exterior angles form // lines

Other justifications:

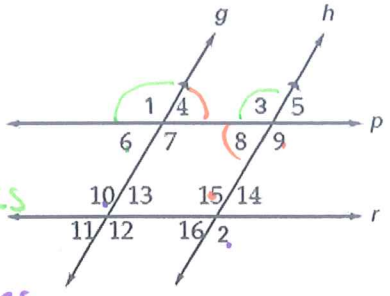
Linear pairs are Suppl. vertical angles are ≅

Def of ⊥ Def of Compl. Def of Suppl. Def of < bisector Def of right angle CLT

angle addition Addition substitution/transitive division subtraction multiplication

Examples:

Part A. Directions: Use the parallel justifications correctly for the figure.



1. If g//h, what justifies <3 ≅ <1?
// lines form ≅ corr. ∠s

2. If g//h, what justifies <4 ≅ <8?
// lines form ≅ alt. int. ∠s

3. If g//h, what justifies <10 ≅ <2?
// lines form ≅ alt. ext. ∠s

4. If g//h, what justifies <7 + <8 = 180?
// lines form Suppl. con. int ∠s

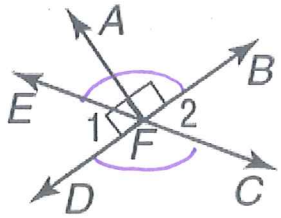
5. If <15 ≅ <9, what justifies p // r?
≅ alt. int ∠s form // lines

6. If <1 ≅ <12, what justifies p // r?
≅ alt. ext. ∠s form // lines.

7. If <6 ≅ <11, what justifies p // r?
≅ corr ∠s form // lines

8. If <14 + <9 = 180, what justifies p // r?
Suppl. con. int ∠s form // lines

Part B. Directions: Use the angle justifications correctly for the figure.



1. What justifies <1 ≅ <2?
vertical ∠s are ≅

2. What justifies <1 + < EFA = <DFA?
angle addition

3. What justifies <AFB = 90°?
def of ⊥ or Right ∠

4. What justifies <2 + <DFC = 180°?
linear pairs are suppl.

5. What justifies <EFB ≅ <CFD?
Vertical ∠s are ≅

Part C. Directions: Use the justifications correctly for the situation.

1. What justifies <1 ≅ <2, <3 ≅ <2, then <1 ≅ <3?
Substitution

2. What justifies 3x = 15, then x = 5?
division

3. What justifies x + 10 = 15, then x = 5?
Subtraction

4. What justifies x – 10 = 15, then x = 25
addition

5. What justifies ½ x = 15, then x = 30?
multiplication

6. What justifies 2x + 7x + 10 = 3, then 9x + 10 = 3?
CLT