

Monday, October 22, 2012

TISK Problems

1. Find the slope of a line that passes through the points (4, 3) and (-2, 7).
2. Write an equation of a line that is perpendicular to the line with the equation $y = -3x + 1$.
3. Write the equation of a line in slope-intercept form that passes through the point (5, 3) and is parallel to the line with the equation $y = \frac{5}{2}x + 1$.

We will have 3 Mental math Questions today.

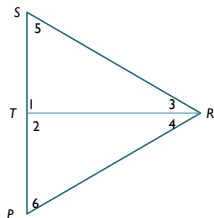
Homework: p. 211 #28-34 even

§4-4 Proving Triangles Congruent

- There are other ways to prove triangles congruent than proving **all** corresponding parts congruent.
- 3 Postulates
 - SSS Postulate (Side-Side-Side Postulate)
 - If the sides of one triangle are congruent to the sides of a second triangle, then the triangles are congruent.
 - SAS Postulate (Side-Angle-Side Postulate)
 - If two sides and the included angle of one triangle are congruent to two sides and the included angle of another triangle, then the triangles are congruent.
 - ASA Postulate (Angle-Side-Angle Postulate)
 - If two angles and the included side of one triangle are congruent to two angles and the included side of another triangle, then the triangles are congruent.

§4-4 Proving Triangles Congruent

- Given:
 - $\angle 1$ and $\angle 2$ are right angles
 - $\overline{ST} \cong \overline{TP}$
- Prove:
 - $\triangle STR \cong \triangle PTR$



Completed Proof: (done together in class)

Statement	Reason
1) $\angle 1$ and $\angle 2$ are right angles $\overline{ST} \cong \overline{TP}$	1) Given
2) $\angle 1 \cong \angle 2$	2) Right Angles Theorem: If two angles are right angles, then they are congruent.
3) $\overline{TR} \cong \overline{TR}$	3) Reflexive Property of \cong Segments: If \overline{AB} exists, then $\overline{AB} \cong \overline{AB}$
4) $\triangle STR \cong \triangle PTR$	4) SAS Postulate: If 2 sides and the incl. \angle of one \triangle are \cong to 2 sides and the incl. \angle of another \triangle , then \triangle s are \cong .

Homework

- p. 211 #28-34 even
