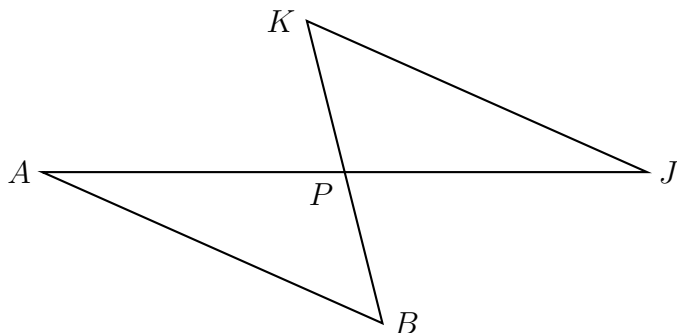


Do Now: Triangle congruence proofs

1. Given $\triangle ABP$ and $\triangle JKP$ with $\angle A \cong \angle J$. P bisects \overline{AJ} . Prove $\triangle ABP \cong \triangle JKP$.



Statement

Reason

1) $\triangle ABP, \triangle JKP$

1) Given

2) _____

2) Given

3) _____

3) Given

4) $\angle APB \cong \angle JPK$

4) _____

5) _____

5) Definition of a bisector

6) $\triangle ABP \cong \triangle JKP$

6) _____

2. Apply the translation $(x, y) \rightarrow (x - 1, y + 3)$ to the point $A(0, -4)$.

3. What is the image of $B(4, 3)$ under a reflection across the x -axis?

4. State the translation that would map $C(1, 5)$ onto $C'(4, 3)$.

5. Express the result to the nearest thousandth.

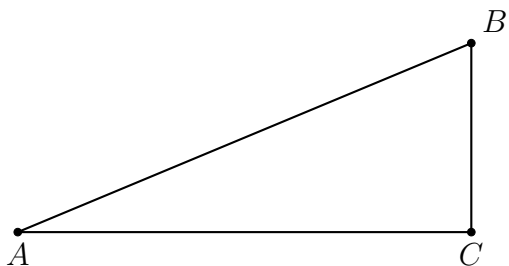
(a) $\sin 30^\circ =$

(c) $\sin 28^\circ =$

(b) $\tan 45^\circ =$

(d) $\cos 25^\circ =$

6. Given right $\triangle ABC$ with $AC = 12$, $BC = 5$, $AB = 13$, $m\angle C = 90^\circ$. Express each trig ratio as a fraction.



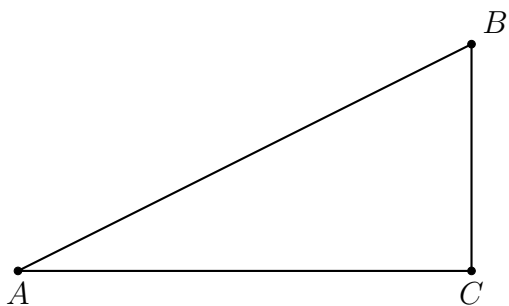
(a) $\sin A =$

(c) $\sin B =$

(b) $\cos A =$

(d) $\tan B =$

7. Given right $\triangle ABC$ with $m\angle C = 90^\circ$, $m\angle A = 30^\circ$, and $AB = 12$.

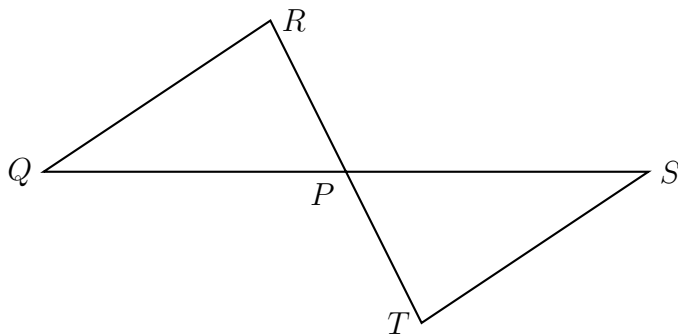


(a) Find AC .

(b) Find BC .

Exit Note: Triangle congruence proof & transformations assessment

1. Given $\triangle QRP$ and $\triangle STP$ with $\overline{QP} \cong \overline{SP}$. P is the midpoint \overline{RT} .
Prove $\triangle QRP \cong \triangle STP$.



<u>Statement</u>	<u>Reason</u>
1) $\triangle QRP, \triangle STP$	1) Given
2) _____	2) Given
3) _____	3) Given
4) $\angle QPR \cong \angle SPT$	4) _____
5) _____	5) Definition of a midpoint
6) $\triangle QRP \cong \triangle STP$	6) _____

2. Apply the translation $(x, y) \rightarrow (x + 1, y + 6)$ to the point $A(-5, 3)$.

3. What is the image of $B(2, 5)$ under a reflection across the y -axis?

4. State the translation that would map $C(2, -3)$ onto $C'(5, -4)$.