

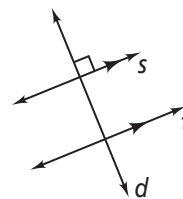
3-4 Standardized Test Prep

Parallel and Perpendicular Lines

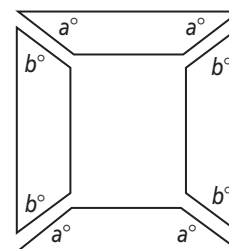
Multiple Choice

For Exercises 1–5, choose the correct letter.

- Which can be used to prove $d \perp t$?
 - (A) Transitive Property of Parallel Lines
 - (B) Transitive Property of Congruence
 - (C) Perpendicular Transversal Theorem
 - (D) Converse of the Corresponding Angles Postulate

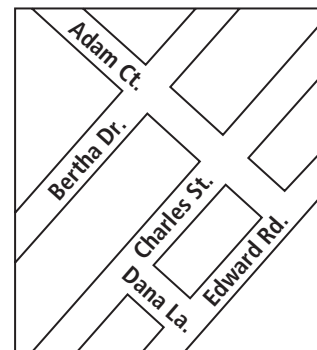


- A carpenter is building a frame. Which values of a and b will ensure that the sides of the finished frame are parallel?
 - (F) $a = 40$ and $b = 60$
 - (G) $a = 45$ and $b = 50$
 - (H) $a = 30$ and $b = 60$
 - (I) $a = 40$ and $b = 40$



For Exercises 3 and 4, use the map at the right.

- If Adam Ct. is perpendicular to Bertha Dr. and Charles St., what must be true?
 - (A) Adam Ct. \perp Edward Rd.
 - (B) Bertha Dr. \parallel Charles St.
 - (C) Adam Ct. \parallel Dana La.
 - (D) Dana La. \perp Charles St.
- Adam Ct. is perpendicular to Charles St. and Charles St. is parallel to Edward Rd. What must be true?
 - (F) Adam Ct. \perp Edward Rd.
 - (G) Adam Ct. \parallel Dana La.
 - (H) Bertha Dr. \parallel Charles St.
 - (I) Dana La. \perp Charles St.



- If $a \perp b$, $b \perp c$, $c \parallel d$, and $d \perp e$, which is not true?
 - (A) $a \perp e$
 - (B) $a \parallel c$
 - (C) $a \parallel d$
 - (D) $b \parallel d$

Short Response

- Write a paragraph proof.

Given: $a \parallel b$, $b \parallel c$, and $d \perp c$

Prove: $a \perp d$

