35. TROPIC OF CANCER The Tropic of Cancer is the circle of latitude farthest north of the equator where the sun can appear directly overhead. It lies $23.5^{\circ}$ north of the equator, as shown.
a. Find the circumference of the Tropic of Cancer using 3960 miles as Earth's approximate radius.
b. What is the distance between two points on the Tropic of Cancer that lie directly across from each other?

36. TAKS REASONING A passenger in an airplane sees two towns directly to the left of the plane.

a. What is the distance $d$ from the airplane to the first town?
b. What is the horizontal distance $x$ from the airplane to the first town?
c. What is the distance $y$ between the two towns? Explain the process you used to find your answer.
37. CHALLENGE You measure the angle of elevation from the ground to the top of a building as $32^{\circ}$. When you move 50 meters closer to the building, the angle of elevation is $53^{\circ}$. How high is the building?

TAKS PRACTICE at classzone.com

## MIXED REVIEW FOR TAKS

REVIEW
Lesson 4.8;
TAKS Workbook

REVIEW
Lesson 9.1; TAKS Workbook
38. taKS PRACTICE The height $h$ (in feet) of a horseshoe tossed during a game of horseshoes is $h=-16 t^{2}+30 t+2$ where $t$ is the time (in seconds). About how long is the horseshoe in the air? TAKS Obj. 5
(A) 1.4 sec
(B) 1.9 sec
(C) 2.9 sec
(D) 3.6 sec
39. taKs Practice Rectangle $K L M N$ has diagonals that intersect at point $P$. What are the coordinates of point $L$ ? TAKS Obj. 7
(F) $(-1,5)$
(G) $(-1,14)$
(H) $(5,5)$
(J) $(5,14)$


