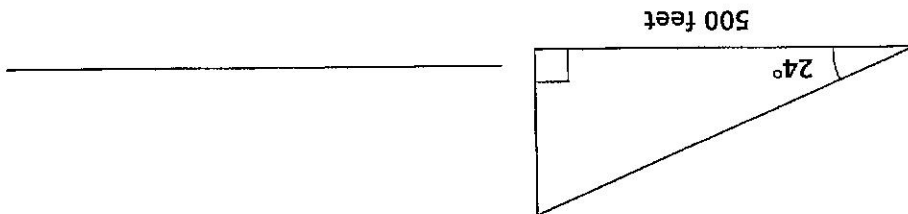


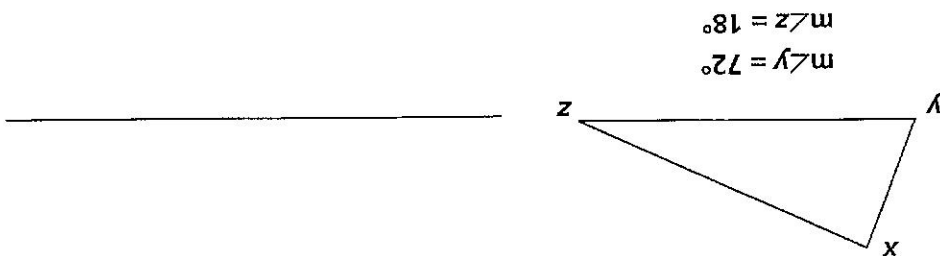
Chapters 1–13 Final Mastery Test, continued

Directions Solve.

22. Suppose you are standing 500 feet away from a tree and you see a hawk hovering directly above that tree. The angle of elevation from you to the hawk is 24° . To the nearest foot, at what height is the hawk hovering?



23. Find $m\angle x$.



Directions Solve.

24. Anita won the class election by a margin of 5 to 3. She received 355 votes. How many votes did the other candidates get?

25. Five friends are waiting in a line. How many different ways can they arrange themselves in that line?

26. Suppose a bag contains 6 marbles. One is white, two are red, and three are yellow. Each time a marble is taken out, it is replaced. Find P (red and yellow).

27. A rectangle has a length 4 cm greater than its width. Its area is 45 cm^2 . What are the length and width of the rectangle?