For 23 – 31, find x. If x is a side length, round to the tenths place. If x is an angle, round to the nearest degree.

23. $\sin x = \dfrac{2}{3}$
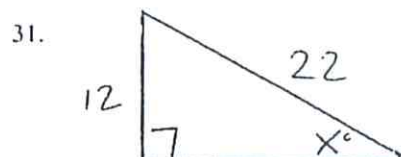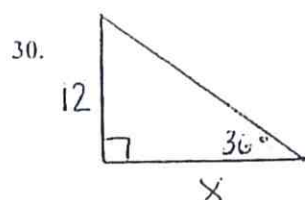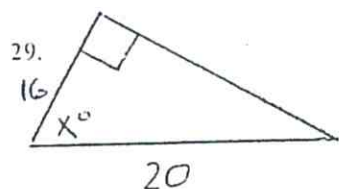
24. $\sin 17° = \dfrac{x}{7}$
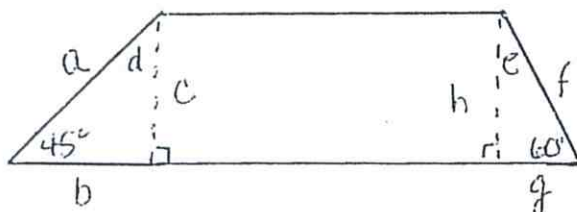
25. $\cos 83° = \dfrac{1}{x}$

26. $\cos x = .39$

27. $\tan 76° = \dfrac{x}{3}$

28. $\tan x = .9$

29.

30.

31.

32. To measure the height of a tree, Amy walked 125 feet from the tree and measured a 32° angle with the ground to the top of the tree. Find the height of the tree. Draw and label a diagram. Round the answer to the nearest tenth of a foot.

Find the values of the seven remaining variables using the given info.

33. $f = 6\sqrt{3}$

34. $c = 8$