

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. $\sin x = \frac{2}{3}$

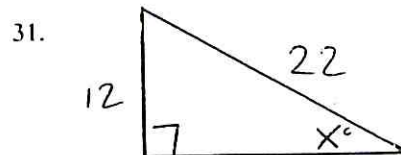
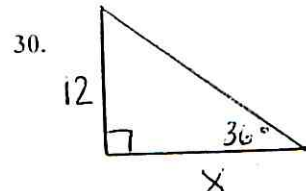
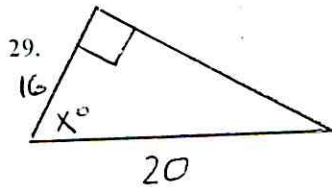
24. $\sin 17^\circ = \frac{x}{7}$

25. $\cos 83^\circ = \frac{1}{x}$

26. $\cos x = .39$

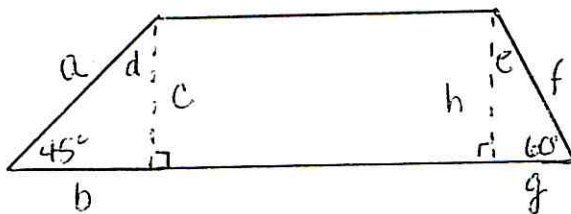
27. $\tan 76^\circ = \frac{x}{3}$

28. $\tan x = .9$



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. $c = 8$

35. Draw and label the two special right triangles. Label all sides and all angles. THEN, find the sin, cos, and tan ratio for each of the following angles: 30° , 60° , 45° , and 90° . (12 ratios all together). Reduce, simplify, use simple radical form, rationalize denominators when necessary.