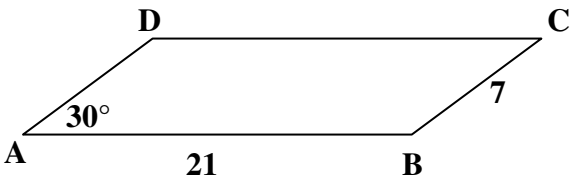
Review for Chapter 7

ABCD is a parallelogram. Find the value of each ratio.

1) AB:BC 2) $\frac{AB}{CD}$ 3) m< C to m< D 4) m< B: m< C 5) AD to perimeter of ABCD	

6) The ratio of the measures of two supplementary angles is 13: 5. Find the measure of each angle.

7) The measures of the angles of a triangle are in the ratio 3: 4: 5. Find the measure of each angle.

8) The measures of the acute angles of a right triangle are in the ratio 3:6. Find the measure of each angle.

9) The measures of the interior angles of a hexagon are in the ratio 3: 5: 5: 6: 7: 7. Find the measure of each angle.

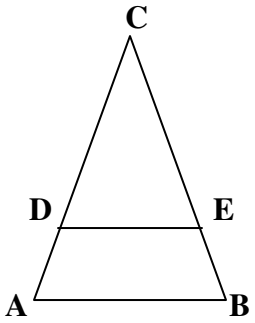
For the figure shown it is given that $\frac{CD}{DA} = \frac{CE}{EB}$.

10) If CD = 10, CE = 15 and CA = 18,

then EB = _____

11) If CD = 13, DA = 4, and CB = 21

then CE = _____



Tell whether the polygons are *always, sometimes, or never* similar.

12) Two equilateral triangles

13) Two rectangles

14) Two rhombuses

15) a right triangle and an acute triangle

16) a right triangle and a scalene triangle

17) an isosceles triangle and an equilateral triangle

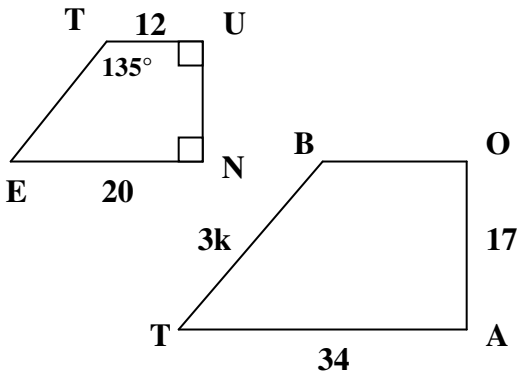
Given that quadrilateral TUNE ~ quadrilateral BOAT answer the following.

18) What is the scale factor of quad. TUNE to quad. BOAT?

19) Find the measure of all the missing angles.

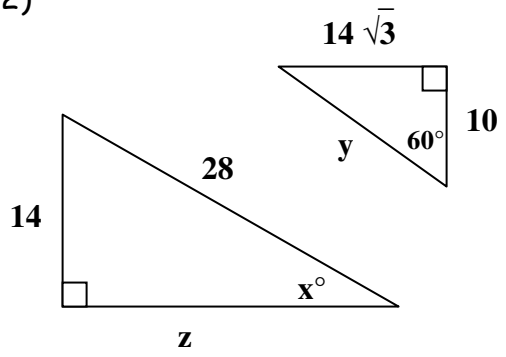
20) Find TE in terms of k

21) Find BO

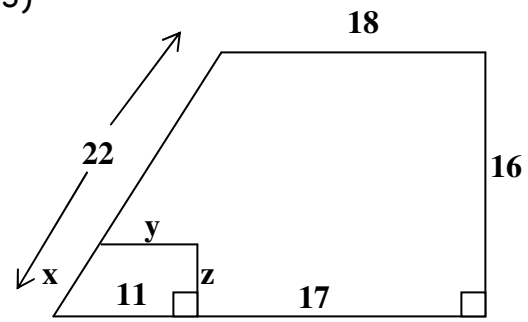


Two similar polygons are shown. Find the values of x, y, and z.

22)

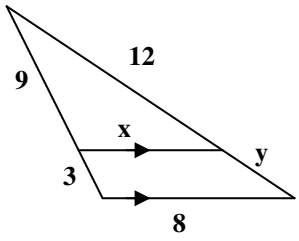


23)

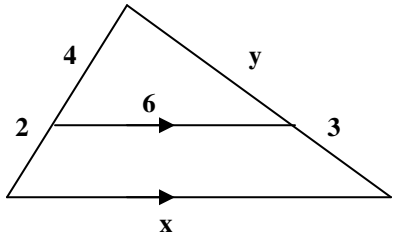


Find the values of x and y.

28)

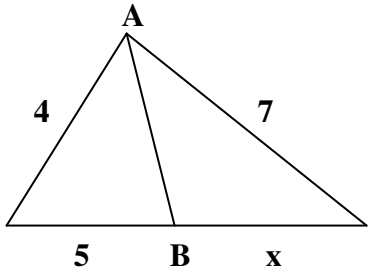


29)

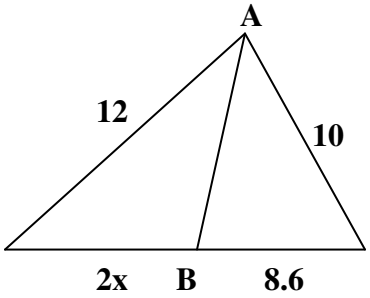


Find the value of x.

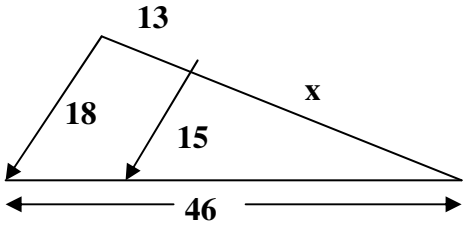
30) given segment AB is an < bisector



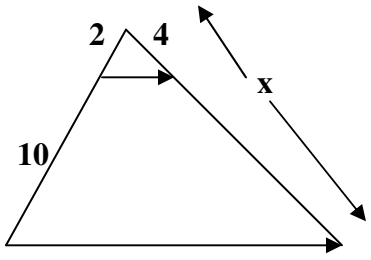
31) given segment AB is an < bisector



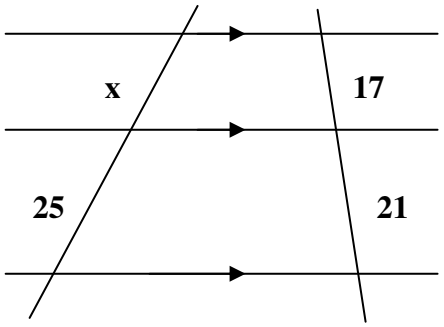
32)



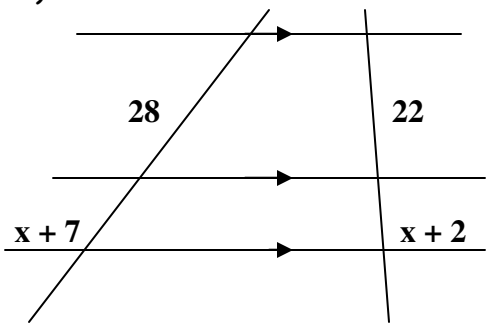
33)



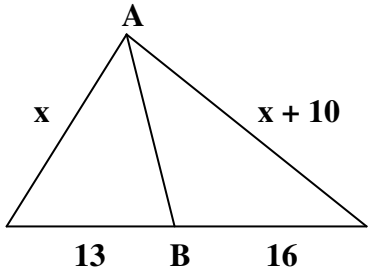
34)



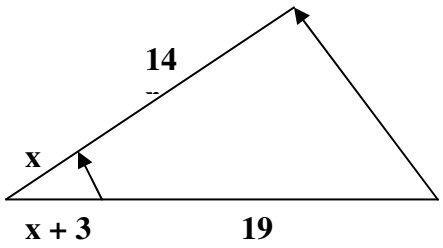
35)



36) given segment AB is an < bisector



37)



Answer Key:

1) 3: 1 2) 1/1 3) 1 to 5 4) 5:1 5) 1 to 8 6) 130°, 50°

7) 45°, 60°, 75° 8) 30°, 60°

9) 65.45°, 109.1°, 109.1°, 130.92°, 152.71°, 152.71°

10) 12 11) 16.06 12) always 13) sometimes

14) sometimes 15) never 16) sometimes 17) sometimes

18) 10 to 17 19) < E and < T = 45°, < B = 135°, < O and < A = 90°

20) 1.76 K 21) 20.4 22) x = 30°, y = 20, z = 33.95

28) x = 6, y = 4 29) x = 9, y = 6 30) x = 8.75 31) x = 5.16

32) x = 65 33) x = 24 34) x = 20.24 35) x = 16.33

36) x = 43.33 37) x = 8.4