

## Review for Lessons 7-1 through 7-3

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

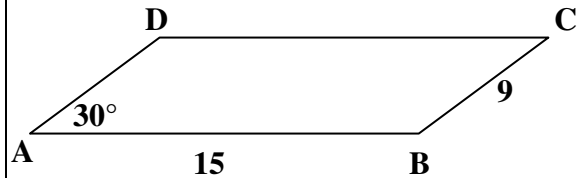
1)  $AB:BC$

2)  $\frac{AB}{CD}$

3)  $m\angle C$  to  $m\angle D$

4)  $m\angle B$ :  $m\angle C$

5)  $AD$  to perimeter of ABCD



6) The ratio of the measures of two supplementary angles is 11: 4. Find the measure of each angle.

7) The measures of the angles of a triangle are in the ratio 1: 4: 7. Find the measure of each angle.

8) The measures of the acute angles of a right triangle are in the ratio 5:7. Find the measure of each angle.

9) The measures of the interior angles of a hexagon are in the ratio 4: 5: 5: 8: 9: 9. Find the measure of each angle.

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

10) If  $CD = 8$ ,  $CE = 12$  and  $CA = 10$ ,

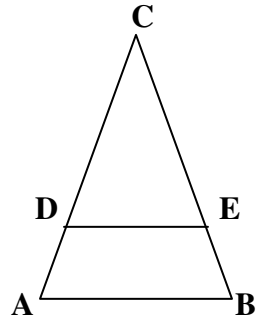
then  $EB = \underline{\hspace{2cm}}$

11) If  $CD = 12$ ,  $DA = 4$ , and  $CB = 20$

then  $CE = \underline{\hspace{2cm}}$

12) If  $DA = 9$ ,  $CA = 36$ ,  $CB = 48$

then  $EB = \underline{\hspace{2cm}}$



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

13) Two equilateral triangles

14) Two rectangles

15) Two rhombuses

16) a right triangle and an acute triangle

17) a right triangle and a scalene triangle

18) an isosceles triangle and an equilateral triangle

Given that quadrilateral TUNE ~ quadrilateral BOAT answer the following.

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

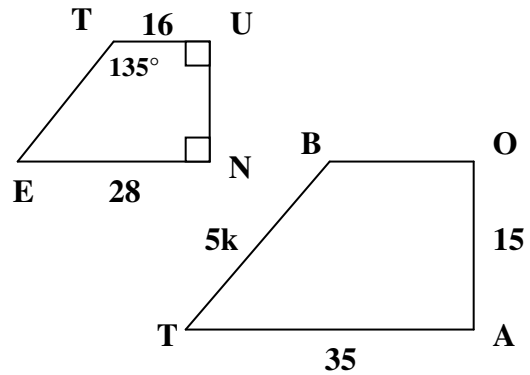
20) Find the measure of all the missing angles.

21) Find UN

22) Find BO

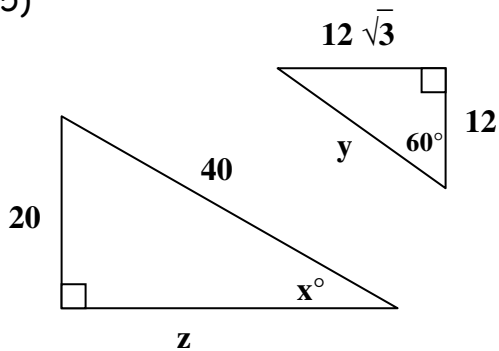
23) Find TE

24) find the ratio of the perimeters

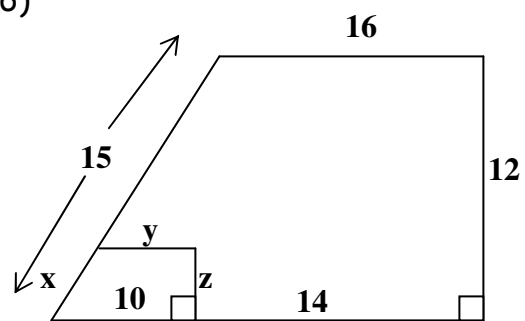


Two similar polygons are shown. Find the values of  $x$ ,  $y$ , and  $z$ .

25)



26)



Answer Key:

1) 5: 3      2) 1/1      3) 1 to 5      4) 5: 1      5) 3 to 16

6)  $48^\circ, 132^\circ$       7)  $15^\circ, 60^\circ, 105^\circ$       8)  $37.5^\circ, 52.5^\circ$

9)  $72^\circ, 90^\circ, 90^\circ, 144^\circ, 162^\circ, 162^\circ$       10) 3      11) 15

12) 12      13) always      14) sometimes      15) sometimes

16) never      17) sometimes      18) sometimes

19)  $4/5$       20)  $m\angle E = 45^\circ, m\angle B = 135^\circ, m\angle O = 90^\circ, m\angle A = 90^\circ, m\angle T = 45^\circ$

21) 12      22) 20      23)  $4k$       24)  $4/5$

25)  $x = 30^\circ, y = 24, z = 20\sqrt{3}$       26)  $x = 6\frac{1}{4}, y = 6\frac{2}{3}, z = 5$