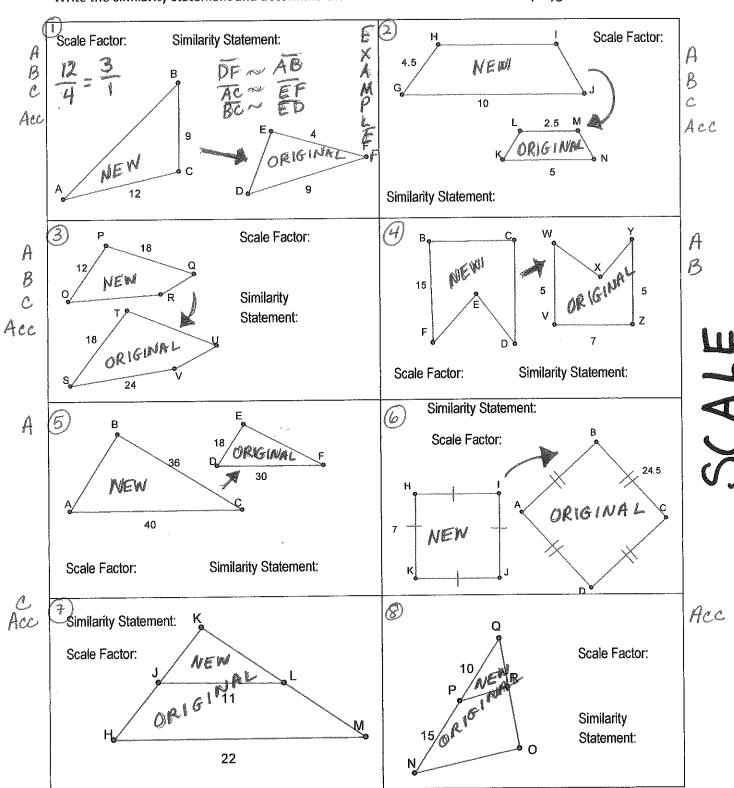Name(s):_____

Write the similarity statement and determine the scale factor for each set of the polygons below.

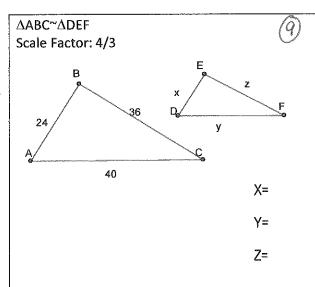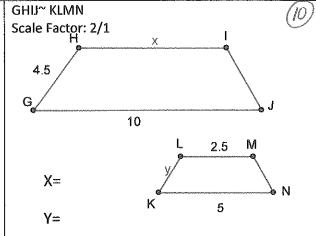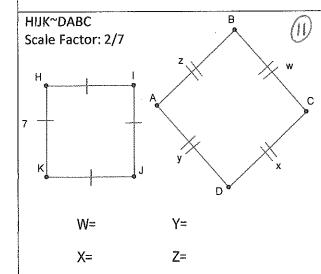**1** (EXAMPLE)

A B C Acc

Scale Factor:

$$\frac{12}{4} = \frac{3}{1}$$

Similarity Statement:

$\overline{DF} \sim \overline{AB}$
$\overline{AC} \sim \overline{EF}$
$\overline{BC} \sim \overline{ED}$

B
9
A NEW C
12

E 4
ORIGINAL F
D 9

2

A B C Acc

Scale Factor:

H   I
4.5   NEW
G   J
10

L 2.5 M
K ORIGINAL N
5

Similarity Statement:

3

A B C Acc

P
18
12 NEW Q
O   R
T
18 ORIGINAL U
S V
24

Scale Factor:

Similarity Statement:

4

A B

B   C   W   Y
NEW   X
15   ORIGINAL
5 E 5
F   V   Z
D   7

Scale Factor: Similarity Statement:

5

A

B
E
18 ORIGINAL F
36 D 30
NEW
A C
40

Scale Factor: Similarity Statement:

6

Similarity Statement:

Scale Factor:

B
24.5
H   I A ORIGINAL C
7 NEW
K   J
D

7

C Acc

Similarity Statement:

Scale Factor:

K
J NEW L
ORIGINAL 11
H M
22

8

Acc

Q
10 NEW R
P
ORIGINAL
15   O
N

Scale Factor:

Similarity Statement:

SCALE

Name(s):_____

Given the scale factor and side measures, find the length of the missing sides.

ΔABC~ΔDEF ⑨ Scale Factor: 4/3 B, E, x, z, D, 36, F, 24, y, A, C, 40 X= Y= Z=	GHIJ~ KLMN ⑩ Scale Factor: 2/1 H, x, I, 4.5, G, J, 10, L, 2.5, M, y, K, N, 5 X= Y=
HIJK~DABC ⑪ Scale Factor: 2/7 B, z, w, H, I, A, C, 7, y, x, K, J, D W= Y= X= Z=	Scale Factor: 2/3 ⑫ Triangle DEF is similar to Triangle MNP. The lengths of the sides of DEF are 12, 16, 20. Find the lengths of the sides of MNP.
Scale Factor: 3/2 ⑬ Rectangle WXYZ is similar to rectangle PQRS. If PQRS has a length of 10 meters and a width of 4 meters, find the length and width of rectangle WXYZ.	Scale Factor: 2/3 ⑭ Rectangle WXYZ is similar to rectangle PQRS. If PQRS has a length of 10 meters and a width of 4 meters, find the length and width of rectangle WXYZ.