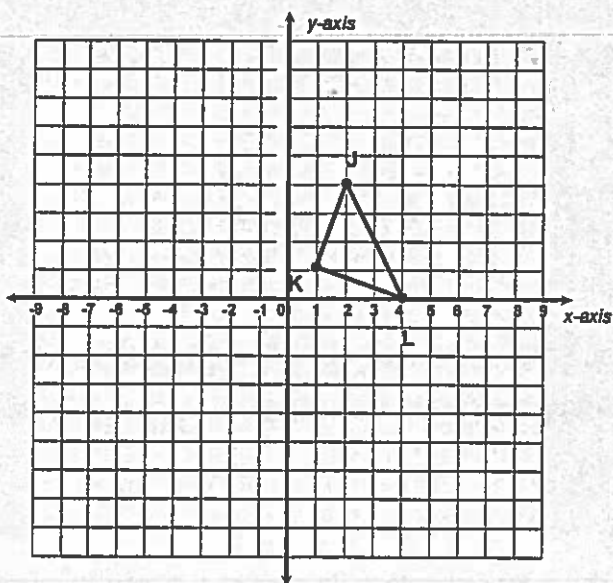


Dilations/Translations Worksheet

Directions: Answer the following questions to the best of your ability. For the y-axis, use the same scaling as the x-axis

1. In Math, the word dilate means to _____ or _____ a figure.
2. If a scale factor is less than 1, then your figure gets _____.
3. If a scale factor is greater than 1, then your figure gets _____.

4.



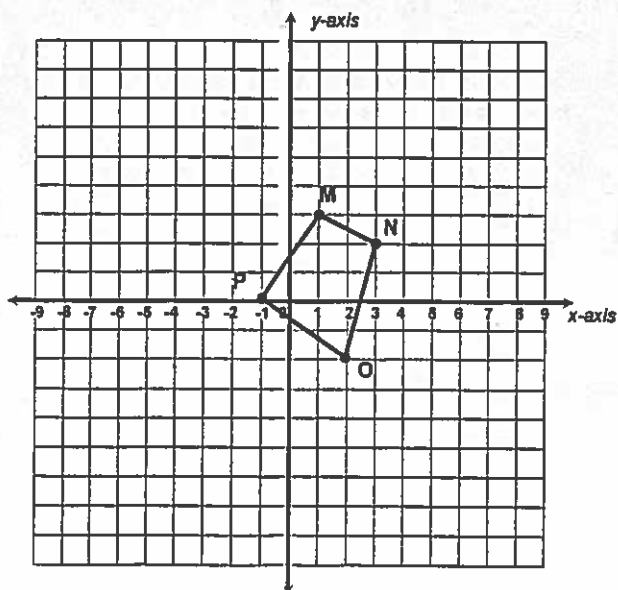
Graph the dilated image of triangle JKL using a scale factor of 2 and (0,0) as the center of dilation.

J: _____ J': _____

K: _____ K': _____

L: _____ L': _____

5.



Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and the origin as the center of dilation.

M: _____ M': _____

N: _____ N': _____

O: _____ O': _____

P: _____ P': _____

Name : _____

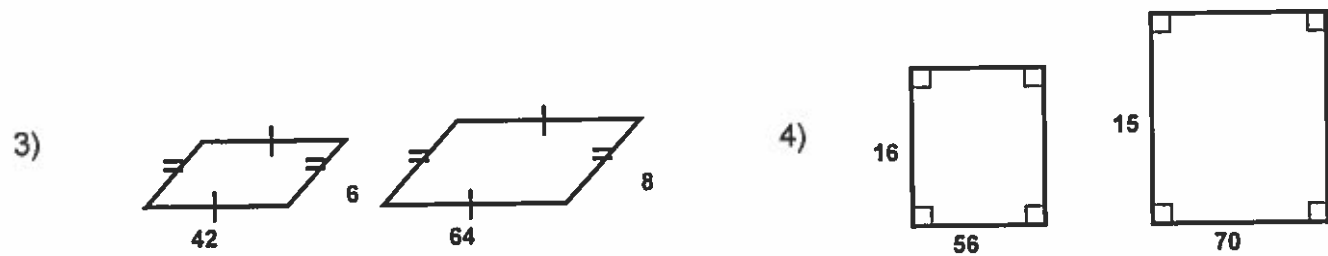
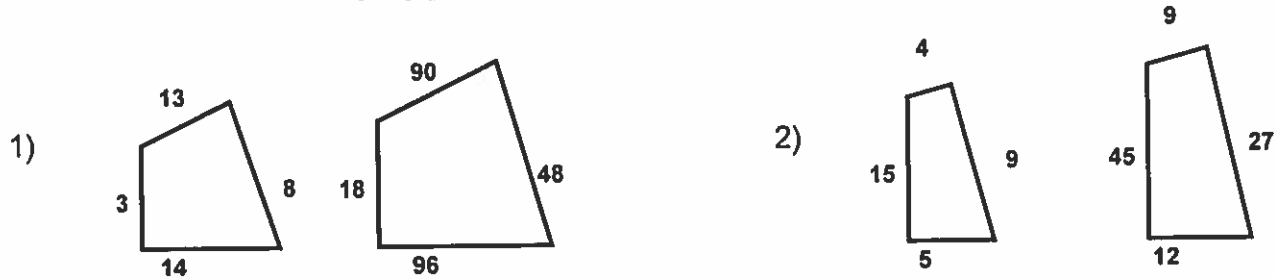
Score : _____

Teacher : _____

Date : _____

Similar Polygons

Determine whether the polygons are similar.



Each polygon pair is similar. Find the scale factor of the smaller shape to the biggest shape.



Name : _____ Score : _____

Teacher : _____ Date : _____

Solving Proportions

Solve each problem. Leave answer as fraction in simplest form.

1) $\frac{11}{7} = \frac{5}{s}$

6) $\frac{4k - 27}{4} = \frac{2}{9}$

2) $\frac{b + 17}{19} = \frac{3}{4}$

7) $\frac{23}{5} = \frac{4}{y}$

3) $\frac{2}{3} = \frac{h - 18}{10}$

8) $\frac{4}{7} = \frac{3}{5r + 7}$

4) $\frac{3}{4} = \frac{a + 26}{5}$

9) $\frac{20}{3f - 26} = \frac{3}{8}$

5) $\frac{7}{x} = \frac{9}{16}$

10) $\frac{7}{3z - 9} = \frac{3}{5}$



Solve each proportion.

$$13) \frac{3}{x} = \frac{8}{6}$$

$$14) \frac{n}{5} = \frac{3}{6}$$

$$15) \frac{3}{6} = \frac{a}{4}$$

$$16) \frac{8}{4} = \frac{4}{v}$$

$$17) \frac{x}{4} = \frac{3}{6}$$

$$18) \frac{n}{2} = \frac{4}{8}$$

$$19) \frac{x}{4} = \frac{2}{5}$$

$$20) \frac{4}{k} = \frac{7}{3}$$

$$21) \frac{4}{p} = \frac{5}{8}$$

$$22) \frac{4}{5} = \frac{8}{x}$$

$$23) \frac{2}{7} = \frac{5}{n}$$

$$24) \frac{6}{2} = \frac{m}{5}$$

$$25) \frac{r}{6} = \frac{5}{7}$$

$$26) \frac{2}{5} = \frac{5}{x}$$

$$27) \frac{6}{b} = \frac{7}{4}$$

$$28) \frac{4}{n} = \frac{6}{5}$$

$$29) \frac{6}{2} = \frac{v}{3}$$

$$30) \frac{2}{x} = \frac{4}{6}$$

$$31) \frac{n}{6} = \frac{7}{4}$$

$$32) \frac{8}{4} = \frac{k}{7}$$

$$33) \frac{4}{6} = \frac{8}{a}$$

$$34) \frac{7}{5} = \frac{p}{7}$$

$$35) \frac{4}{7} = \frac{7}{x}$$

$$36) \frac{6}{n} = \frac{4}{7}$$