Name _____   Date _____

Dilations and Parallel Lines - Independent Practice Worksheet

Complete all the problems. Write all your answers in slope-intercept form.

1. Line ℓ has the equation y=-1/4x − 4.

Write the equation of the image of ℓ after dilation with a scale factor of 1/4, centered at the origin.

2. Line ℓ has the equation y=5x − 5.

Write the equation of the image of ℓ after dilation with a scale factor of 1/5, centered at the origin.

3. Line ℓ has the equation y=-1/4x − 3.

Write the equation of the image of ℓ after dilation with a scale factor of 2, centered at the origin.

4. Line ℓ has the equation y=1/4x −2.

Write the equation of the image of ℓ after dilation with a scale factor of ½, centered at the origin.

5. Line ℓ has the equation y=1/2x + 3.

Write the equation of the image of ℓ after dilation with a scale factor of 1/3, centered at the origin.

6. Line ℓ has the equation y=-2x − 1.

Write the equation of the image of ℓ after dilation with a scale factor of 5, centered at the origin.

7. Line ℓ has the equation y=1/3x−1.

Write the equation of the image of ℓ after dilation with a scale factor of 4, centered at the origin.

8. Line ℓ has the equation y=-5x+2.

Write the equation of the image of ℓ after dilation with a scale factor of 3, centered at the origin.

9. Line ℓ has the equation y=1/5x−8.

Write the equation of the image of ℓ after dilation with a scale factor of 1/4, centered at the origin.

10. Line ℓ has the equation y=2x−5.

Write the equation of the image of ℓ after dilation with a scale factor of 1/5, centered at the origin.