

Dilations and Parallel Lines - Matching Worksheet

Match the description of line of dilation to the proper equation in slope-intercept form.

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| _____ | 1. Line ℓ has the equation $y=5x-1$. Write the equation of the image of ℓ after dilation with a scale factor of 2, centered at the origin. | a. $y=1/5x$ |
| _____ | 2. Line ℓ has the equation $y=4x+1$. Write the equation of the image of ℓ after dilation with a scale factor of 5, centered at the origin. | b. $y=5x - 2$ |
| _____ | 3. Line ℓ has the equation $y=-4x-8$. Write the equation of the image of ℓ after dilation with a scale factor of $1/2$, centered at the origin. | c. $y=-4x - 4$ |
| _____ | 4. Line ℓ has the equation $y=1/4x-1$. Write the equation of the image of ℓ after dilation with a scale factor of 2, centered at the origin. | d. $y=-1/2x - 1$ |
| _____ | 5. Line ℓ has the equation $y=1/5x$. Write the equation of the image of ℓ after dilation with a scale factor of 4, centered at the origin. | e. $y=4x +5$ |
| _____ | 6. Line ℓ has the equation $y=-3x-2$. Write the equation of the image of ℓ after dilation with a scale factor of 3, centered at the origin. | f. $y=1/4x +2$ |
| _____ | 7. Line ℓ has the equation $y=-1/2x-4$. Write the equation of the image of ℓ after dilation with a scale factor of $1/4$, centered at the origin. | g. $y = -3x - 6$ |

