TEST on block day next week

1. Describe the transformation from the parent function:

$$f(x) = |x|$$

a) $g(x) = |x| + 9$

b) $h(x) = \dfrac{2}{7}|x|$

c) $k(x) = |x + 2|$

2. Write the new function for the given transformation:

Parent function:

$$g(x) = x^2$$

a) reflected across the x-axis

$h(x) =$

b) reflected across the y-axis

$h(x) =$

c) Vertically stretched by a factor of 3, vertically translated 8 units down.

$h(x) =$

3. In point-slope form, write the equation of the line parallel to $4x - 3y = 9$ passing through (-7,2).

4. In slope-intercept form, write the equation of the line perpendicular to $y = -3x + 5$ passing through (4,-2).