Math C

Unit 4 Quiz - practice test

1. Simplify the following radical expression.
$$\sqrt{60xy^2}$$

2. Simplify the following radical expression.
$$\left(\sqrt[4]{x^5}\right)^3$$

3. Simplify the following polynomial expression.
$$(4x+7)-(2x-9)-(5x+6)$$

4. Simplify the following polynomial expression.
$$2x\left(x^2-6x+4\right)$$

5. Simplify the following polynomial expression.
$$(x-8)(x-9)$$

6. Simplify the following polynomial expression.
$$(4x+1)(4x-1)$$

7. Simplify the following polynomial expression.
$$(3x+4)^2$$

8. What is the vertex of the following quadratic function?
$$y=-2\left(x+5\right)^2-7$$

9. What is the range of the following quadratic function?
$$y=2(x-3)^2+5$$

10. Rewrite the following quadratic function into standard form.
$$y=-2\left(x-4\right)^2+20$$