## Exercise 32

For the following exercises, evaluate the expressions using the given variable.

$$4y(7-2)^2 + 200$$
 for  $y = -2$ 

## Solution

Simplify the given expression before plugging in y = -2.

$$4y(7-2)^{2} + 200 = 4y(5)^{2} + 200$$
$$= 4y(25) + 200$$
$$= 100y + 200$$
$$= 100(-2) + 200$$
$$= -200 + 200$$
$$= 0$$