

**Exercise 31**

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

$$4z - 2z(1 + 4) - 36 \text{ for } z = 5$$

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**Solution**

Simplify the given expression before plugging in  $z = 5$ .

$$\begin{aligned} 4z - 2z(1 + 4) - 36 &= 4z - 2z(5) - 36 \\ &= 4z - 10z - 36 \\ &= -6z - 36 \\ &= -6(5) - 36 \\ &= -30 - 36 \\ &= -66 \end{aligned}$$