

Exercise 28

Properties of Real Numbers Use properties of real numbers to write the expression without parentheses.

$$(3a)(b + c - 2d)$$

Solution

Use the associative property of addition.

$$(3a)[(b + c) - 2d]$$

Use the distributive property.

$$(3a)(b + c) + (3a)(-2d)$$

Use the distributive property again.

$$(3a)b + (3a)c + (3a)(-2d)$$

Use the associative property of multiplication.

$$3ab + 3ac - 6ad$$