

# CHAPTER 9B Warm Ups

## Check Skills You'll Need

## Lesson 9-2

Multiply.

1.  $3(302)$

2.  $41(7)$

3.  $9(504)$

Simplify each expression.

4.  $4(6 + 5x)$

5.  $-8(2y + 1)$

6.  $(5v - 1)5$

7.  $7(p - 2)$

8.  $(6 - x)9$

9.  $-2(4q - 1)$

## Lesson Quiz

## Lesson 9-2

1. Simplify  $-2x^2(-3x^2 + 2x + 8)$ .
2. Find the GCF of  $16b^4 - 4b^3 + 8b^2$ .
3. Factor  $3x^3 + 9x^2$ .
4. Factor  $10y^3 + 5y^2 - 15y$ .

## Check Skills You'll Need

## Lesson 9-5

List all of the factors of each number.

1. 24

2. 12

3. 54

4. 15

5. 36

6. 56

7. 64

8. 96

**Lesson Quiz****Lesson 9-5**

Factor each expression.

1.  $c^2 + 6c + 9$

2.  $x^2 - 11x + 18$

3.  $g^2 - 2g - 24$

4.  $y^2 + y - 110$

5.  $m^2 - 2mn + n^2$

**Check Skills You'll Need****Lesson 9-6**

Find the greatest common factor.

1.  $12x^2 + 6x$

2.  $28m^2 - 35m + 14$

3.  $4v^3 + 36v^2 + 10$

Factor each expression.

4.  $x^2 + 5x + 4$

5.  $y^2 - 3y - 28$

6.  $t^2 - 11t + 30$

**Lesson Quiz****Lesson 9-6**

Factor each expression.

1.  $3x^2 - 14x + 11$

2.  $6t^2 + 13t - 63$

3.  $9y^2 - 48y - 36$

**Check Skills You'll Need****Lesson 9-7**

Simplify each expression.

1.  $(3x)^2$

2.  $(5y)^2$

3.  $(15h^2)^2$

4.  $(2ab^2)^2$

Simplify each product.

5.  $(c - 6)(c + 6)$

6.  $(p - 11)(p - 11)$

7.  $(4d + 7)(4d + 7)$

**Lesson Quiz****Lesson 9-7**

Factor each expression.

1.  $y^2 - 18y + 81$

2.  $9a^2 - 24a + 16$

3.  $p^2 - 169$

4.  $36x^2 - 225$

5.  $5m^2 - 45$

6.  $2c^2 + 20c + 50$