

CHAPTER 9A Warm Ups

Check Skills You'll Need

Lesson 9-1

Simplify each expression.

$$1. 6t + 13t$$

$$2. 5g + 34g$$

$$3. 7k - 15k$$

$$4. 2b - 6 + 9b$$

$$5. 4n^2 - 7n^2$$

$$6. 8x^2 - x^2$$

Lesson Quiz

Lesson 9-1

Simplify each expression. Then name each polynomial by its degree and number of terms.

$$1. -4 + 3x - 2x^2$$

$$2. 2b^2 - 4b^3 + 6$$

$$3. (2x^4 + 3x - 4) + (-3x + 4 + x^4)$$

$$4. (-3r + 4r^2 - 3) - (4r^2 + 6r - 2)$$

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 9-3

Find each product.

1. $4r(r - 1)$ 2. $6h(h^2 + 8h - 3)$ 3. $y^2(2y^3 - 7)$

Simplify. Write each answer in standard form.

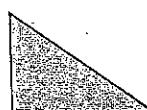
4. $(x^3 + 3x^2 + x) + (5x^2 + x + 1)$
5. $(3t^3 - 6t + 8) + (5t^3 + 7t - 2)$
6. $w(w + 1) + 4w(w - 7)$ 7. $6b(b - 2) - b(8b + 3)$
8. $m(4m^2 - 6) + 3m^2(m + 9)$ 9. $3d^2(d^3 - 6) - d^3(2d^2 + 4)$

Lesson Quiz

Lesson 9-3

Simplify each product using any method.

1. $(x + 3)(x - 6)$
2. $(2b - 4)(3b - 5)$
3. $(3x - 4)(3x^2 + x + 2)$
4. Find the area of the shaded region.



Check Skills You'll Need

Lesson 9-4

Simplify.

1. $(7x)^2$

2. $(3v)^2$

3. $(-4c)^2$

4. $(5g^3)^2$

Use FOIL to find each product.

5. $(j + 5)(j + 7)$

6. $(2b - 6)(3b - 8)$

7. $(4y + 1)(5y - 2)$

8. $(x + 3)(x - 4)$

9. $(8c^2 + 2)(c^2 - 10)$

10. $(6y^2 - 3)(9y^2 + 1)$

Lesson Quiz

Lesson 9-4

Find each square.

1. $(y + 9)^2$

2. $(2h - 7)^2$

3. 41^2

4. 29^2

5. Find $(p^3 - 7)(p^3 + 7)$.

6. Find $32 \cdot 28$.