

Algebra 1B
Review Ch. 8.1-8.4

Quiz today 8.3-8.4
MCT Thurs. 8.1-8.4

8-1 Adding and Subtracting Polynomials

Write each polynomial in standard form.

11. $x + 2 + 3x^2$

12. $1 - x^4$

$$3x^2 + x + 2$$

$$-x^4 + 1$$

$$x^3 y^5$$

Find each sum or difference.

15. $(x^3 + 2)$ + $(-3x^3 - 5)$

$$-2x^3 - 3$$

(x)

16. $a^2 + 5a - 3 \overline{) 2a^2 - 4a + 3}$

$$\begin{array}{r} a^2 + \underline{5a} - \underline{3} \\ - 2a^2 + \underline{4a} - \underline{3} \end{array}$$

$$-1a^2 + 9a + -6$$

8-2 Multiplying a Polynomial by a Monomial

Solve each equation.

19. $x^2(x + 2) = x(x^2 + 2x + 1)$

$$\begin{array}{c} \text{X}^3 + 2\text{X}^2 \\ - \text{X}^3 - 2\text{X}^2 \end{array} = \begin{array}{c} \text{X}^3 \\ - \text{X}^3 \end{array} + \begin{array}{c} 2\text{X}^2 \\ - 2\text{X}^2 \end{array} + \text{X}$$

$$0 = \text{X}$$

$$\text{X} = 1$$

21. $2(4w + w^2) - 6 = 2w(w - 4) + 10$

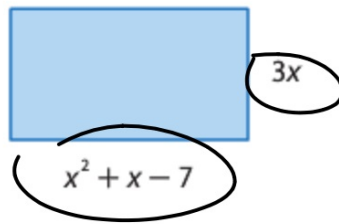
$$8w + \cancel{2w^2} - 6 = \cancel{2w^2} - 8w + 10$$

$$\begin{array}{rcl} 8w - 6 & = & -8w + 10 \\ + 8w + 6 & & + 8w + 6 \end{array}$$

$$\frac{16w}{16} = \frac{16}{16}$$

$$w = 1$$

22. **GEOMETRY** Find the area of the rectangle.



$$(3x) \cdot (x^2 + x - 7)$$

$$3x^3 + 3x^2 - 21x$$

8-3 Multiplying Polynomials

Find each product.

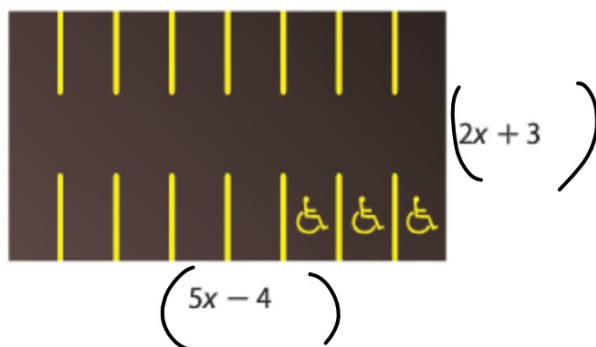
23. $(x - 3)(x + 7)$

24. $(3a - 2)(6a + 5)$

$$\begin{array}{r} x - 3 \\ x + 7 \\ \hline x^2 - 3x \quad -21 \\ x^2 - 3x \\ \hline x^2 + 4x - 21 \end{array}$$

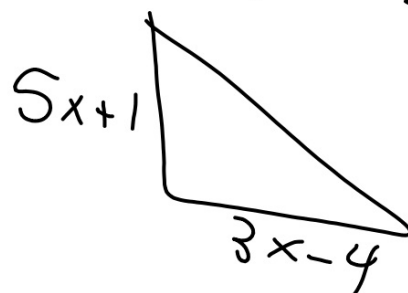
27. **PARKING LOT**

The parking lot shown is to be paved. What is the area to be paved?



$$(2x + 3)(5x - 4)$$

$$A = \frac{1}{2}bh$$



31. $(2x - 3)(2x + 3)$

$$\begin{array}{r} 2x - 3 \\ 2x + 3 \\ \hline 4x^2 \quad \textcircled{6x - 6x} - 9 \\ \hline 4x^2 - 9 \end{array}$$

32. $(2r + 5t)^2$

$$2r + 5t$$

$$2r + 5t$$

$$\begin{array}{r} + 10tr + 25t^2 \\ 4r^2 + 10tr \end{array}$$

$$4r^2 + 10tr + 25t^2$$

$$(3x^2 + 5a)^2$$

$$3x^2 + 5a$$

$$3x^2 + 5a$$

$$\begin{array}{r} 15x^2a + 25a^2 \\ 9x^4 + 15x^2a \end{array}$$

$$9x^4 + 30x^2a + 25a^2$$