Algebra 1
Review Ch. 8.1-8.4
Quiz today 8.3-8.4
MCT tomorrow

8-1 Adding and Subtracting Polynomials

Write each polynomial in standard form.

11. $x + 2 + 3x^2$ **12.** $1 - x^4$

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

$d = 2$

$LC = 3$

Find each sum or difference.

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

$-2x^3 + -3$

16. $a^2 + 5a - 3 + (2a^2 - 4a + 3)$

$a^2 + 5a - 3 - 2a^2 + 4a - 3$

$-a^2 + 9a - 6$

8-2 Multiplying a Polynomial by a Monomial

Solve each equation.

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

$x^2 \cdot x \quad x^2 \cdot 2 \quad x \cdot x^2 \quad x \cdot 2x \quad x \cdot 1$

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

$-x^3 \quad -2x^2 \quad -x^3 \quad -2x^2$

$\sqrt{0} = \sqrt{x^2}$

$x =$

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

$2 \cdot 4w \quad 2 \cdot w^2 \quad 2w \cdot w \quad 2(0) \cdot -4$

$8w + 2w^2 - 6 = 2w^2 - 8w + 10$

$+8w \quad -2w^2 \quad -2w^2 \quad +8w$

$16w - 6 = 10$

$+6 \quad +6$

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

$w = 1$

$2x - 3$

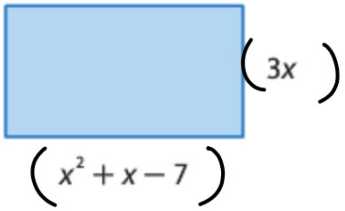
$2x - 3$

$-6x + 9$

$4x^2 - 6x$

$(2x - 3)^2$

22. GEOMETRY Find the area of the rectangle.



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

$3x \cdot x^2 \quad 3x \cdot x \quad 3x \cdot -7$

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

8-3 Multiplying Polynomials

Find each product.

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

$x - 3$

$x + 7$

$7x - 21$

$x^2 - 3x$

$x^2 + 4x - 21$

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

$3a - 2$

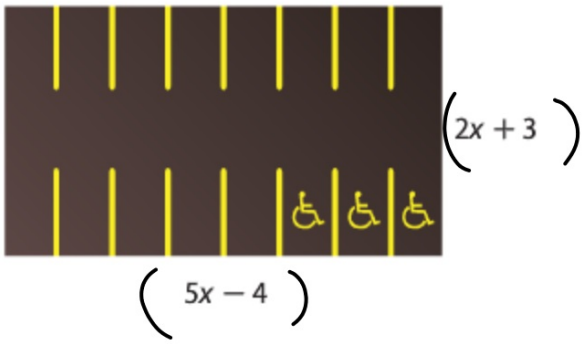
$6a + 5$

$15a - 10$

$18a^2 - 12a$

$18a^2 + 3a - 10$

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



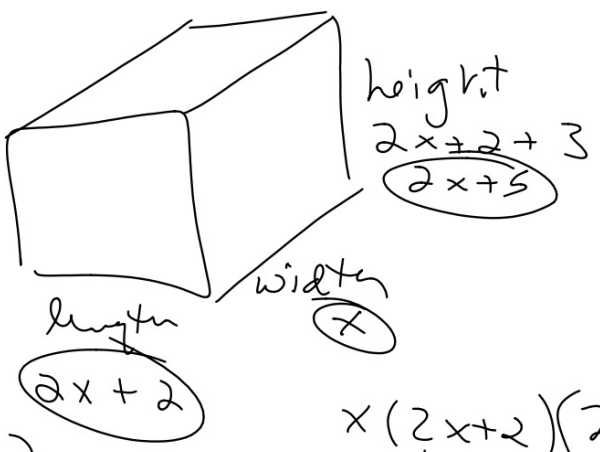
31. $(2x - 3)(2x + 3)$

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

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

$$\begin{array}{r} 2r+5t \\ 2r+5t \\ \hline 10rt+25t^2 \\ 4r^2+10rt \\ \hline 4r^2+20rt+25t^2 \end{array}$$

27



$2x+2$

$2x+5$

$4x^2 \quad 10x \quad 10$

$4x^2 \quad 4x$

$x(2x+2)(2x+5)$

$x(4x^2+14x+10)$

$4x^2 \cdot x + 14x \cdot x + 10x$

$4x^3 + 14x^2 + 10x$