Algebra 1
Review Ch. 8.1-8.4

Quiz today 8.3-8.4

Triangle puzzles

MCT Wed. 8.1-8.4

8-1 Adding and Subtracting Polynomials

Write each polynomial in standard form.

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

12. $1 - x^4$

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

Find each sum or difference.

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

$-2x^3 + -3$

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

$1a^2 + 5a - 3 \; -2a^2 + 4a + -3$

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

8-2 Multiplying a Polynomial by a Monomial

Solve each equation.

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

$x^2 \cdot x + x^2 \cdot 2 = x \cdot x^2 + x \cdot 2x + x \cdot 1$

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

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

$0 = x$

$x =$

$3 = x + 5$

$-5 \qquad -5$

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

$2 \cdot 4w + 2w^2 + -6 = 2w \cdot w + 2w \cdot 4 + 10$

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

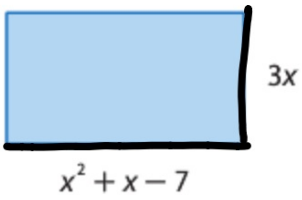
$-8w \quad -2w^2 \qquad -2w^2 \quad -8w$

$-6 = -16w + 10$

$-10 \qquad -10$

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

22. GEOMETRY Find the area of the rectangle.



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

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

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

8-3 Multiplying Polynomials

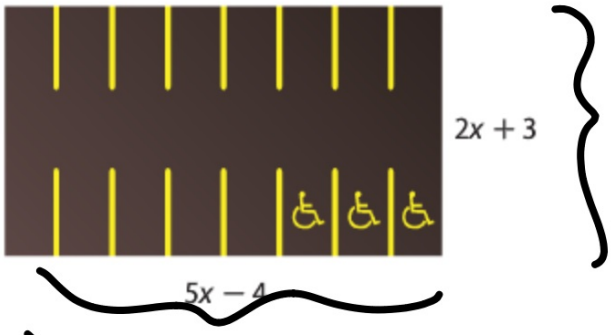
Find each product.

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

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

$$\begin{array}{r} x-3 \\ x-7 \\ \hline -7x+21 \\ x^2 \quad -3x \\ \hline x^2+-10x+21 \end{array}$$

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



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

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

$4x^2 - 9$

$2 \cdot 2r \cdot 5t$

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

$4r^2 + 20rt + 25t^2$