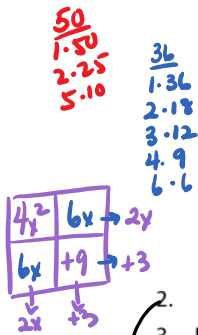


# Factoring 4

June 2, 2017 9:24 AM

## Factoring Friday #4

1. Factor completely:



$$x^2 + 15x + 50 \rightarrow (x+5)(x+10)$$

$$x^2 - 9x + 36 \text{ not factorable}$$

$$x^2 - 25 \rightarrow (x-5)(x+5)$$

$$4x^2 + 12x + 9 \rightarrow (2x+3)(2x+3)$$

$$x^2 + 10xy + 24y^2 \rightarrow (x+6y)(x+4y)$$

$$\frac{2x^2y + 16xy - 18y}{2y} \rightarrow 2y(x^2 + 8x - 9) \rightarrow 2y(x+9)(x-1)$$

2. Expand:  $3(2x-1)(x+5)$

3. Draw the algebra tile model for:  $(2x+1)(x-3)$

4. Write the prime factorization for 730

5. Convert to entire radicals:  $5\sqrt{2}, \frac{1}{3}\sqrt[3]{4}$

2.  $3(2x-1)(x+5)$   
 $(6x-3)(x+5)$   
 $6x^2 + 30x - 3x - 15$   
 $6x^2 + 27x - 15$

3.  $(2x+1)(x-3)$



$$2x^2 - 5x - 3$$

4. 
$$\begin{array}{r} 2 \overline{) 730} \\ \underline{36} \phantom{0} \\ 73 \phantom{0} \\ \underline{73} \\ 0 \end{array}$$

$$730 = 2 \cdot 5 \cdot 73$$

5.  $5\sqrt{2}$   
 $\sqrt{5 \cdot 2}$   
 $\sqrt{25 \cdot 2}$   
 $\sqrt{50}$

$\frac{1}{3}\sqrt[3]{4}$   
 $\sqrt[3]{(\frac{1}{3})^3 \cdot 4}$   
 $\sqrt[3]{\frac{1^3}{3^3} \cdot 4}$   
 $\sqrt[3]{\frac{1 \cdot 4}{27}} \rightarrow \sqrt[3]{\frac{4}{27}}$