



Thursday, September 19

Multiply:

$$(x + 4)(x - 9)$$

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

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Students will verbally explain how to  
graph sine and cosine functions

(using the words:  
range, right triangles, periodic...)

Factor:  $6x^2 - x - 12$

- (1) Find two numbers that add to b  
and multiply to the product of a and c

$$\begin{array}{rcl} -9 & + & 8 \\ -9 & \times & 8 \end{array} \begin{array}{l} = 1 \\ = -72 = 6(-12) \end{array}$$

- (2) Rewrite the original function,  
splitting the middle term

$$6x^2 - 9x + 8x - 12$$

- (3) Factor out the common term in  
the first two terms

$$3x(2x - 3) + 8x - 12$$

- (4) Factor out the common term in  
the last two terms

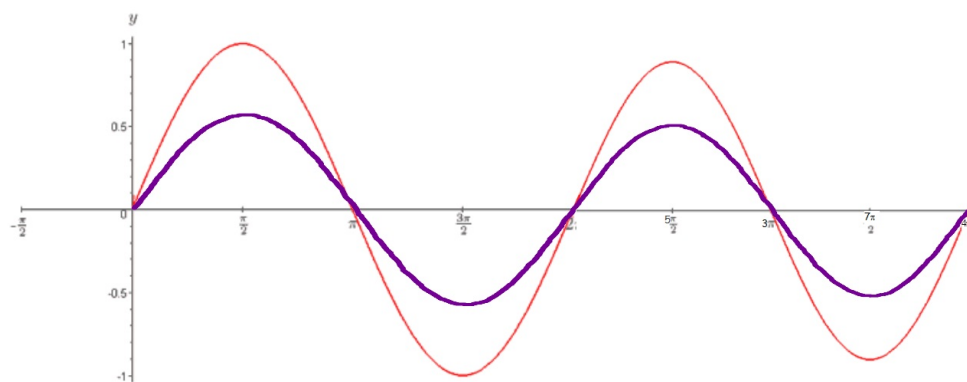
$$3x(2x - 3) + 4(2x - 3)$$

- (5) Factor out the common term

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

$$\begin{array}{l} 3xy + 4y \\ y(3x + 4) \end{array}$$

if  $y = A\sin(x)$ , how is your graph affected? (Be as specific as possible)



if  $y = \sin(x) + D$ , how is your graph affected? (Be as specific as possible)

