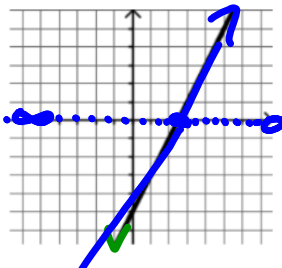
Name: $-4x^2(5x-6)(5x+6)$ Block: Algebra EOC Review

Factor the expression. $144x^2 - 100x^4$ $-100x^4+144x^2$ $-4x^2(25x^2-36)$ GCF	D.O.T.S.	Factor the expression. $9x + 15 - 6x^2$ $-6x^2+9x+15$ $-3(2x^2-3x-5)$ $2x^2+2x-5x-5$	$-10 \mid -5$ $-5\cdot2 \mid -5+2$ $-3(2x-5)(x+1)$
Factor the expression. $20r^3 - 3 + 15r - 4r^2$ $(20r^3-4r^2)(+15r-3)$ $4r^2(5r-1)+3(5r-1)$ $(5r-1)(4r^2+3)$		Multiply and simplify. $3x\sqrt{15x} \cdot 2\sqrt{10x^2}$ $30x^2\sqrt{6x}$	$6x\sqrt{150x^3}$ $6x\sqrt{25 \cdot 6 \cdot x \cdot x \cdot x}$ $5x$
Convert 15.5 feet to meters. Use 1 inch = 2.54 cm. $\frac{15.5\text{ ft}}{} \cdot \frac{12\text{ in}}{1\text{ ft}} \cdot \frac{2.54\text{ cm}}{1\text{ in}} \cdot \frac{1\text{ m}}{100\text{ cm}}$ 4.72 meters		Solve the system of equations. $-4+5$ $y = -2x + 5$ $-x + y = -1$ $-x+(-2x+5)=-1$ $-3x+5=-1$ $-5 \quad -5$ $-3x=-6$ $x=2$ $y=1$ $(2,1)$	Substitution
UPS charges \$7 for the first pound, and \$0.20 for each additional pound. FedEx charges \$5 for the first pound and \$0.30 for each additional pound. How many pounds, p, will it take for UPS and FedEx to cost the same? $.20p+7=.30p+5$ $-.10p=-2$	$.20p+7$ $.30p+5$ 20 lbs		Domain: ℝ Range: ℝ F(x) > 0: $2.5<x<\infty$ F(x) < 0: $-\infty<x<2.5$ X-Int: $(2.5,0)$ Y-Int: $(0,-5)$ Int of Inc: $-\infty<x<\infty$ Int of Dec: no End Behavior: As x → $-\infty$, f(x) → $-\infty$ As x → $+\infty$, f(x) → $+\infty$
The perimeter of a rectangular wooden deck is 90 feet. The deck's length, L, is 5 feet less than 4 times the height, H. Determine the dimensions, in feet, of the wooden deck. $8H-10+2H=90$ $10H-10=90$ $10H=100$	$2L+2H=90$ $L=4H-5$ $2(4H-5)+2H=90$ 10ft = Height L=35ft	Michelle has a maximum of 4500 mL of water for her plants today. Each basil plant requires 350 mL of water, and each fennel plant requires 525 mL.	A) Write an inequality that represents the number of basil and fennel plants Michelle can water today. $350B+525F\le4500$ B) If Michelle waters 10 basil plants, how many fennel plants can she water? How much water will she have left? $350(10)+525F\le4500$ $F\le1.9$ can only 1 Fennel plant 475mL left over