

CALCULUS  
Miscellaneous precalculus  
**OLD**

**0040-1.** Find the intervals of positivity and  
OLD negativity for  $f(x) = (x + 3)^3(x - 2)^2(x - 5)$ .

**0040-2.** a. Expand  $(x + y)^6$ .

OLD b. Expand  $(u^2 + 2v^3)^6$ .

**0040-3.** Rationalize the numerator in

OLD 
$$\frac{\sqrt{[2(4 + h)] + 5} - \sqrt{[2 \cdot 4] + 5}}{h}.$$