

University of North Georgia
Mathematics Tournament
April 7, 2018

Solutions for the Afternoon Team Competition

"

Tqwpf"3"

$$D \frac{8}{x} \frac{37x}{8} = 37x^{-4} + \frac{37}{8}x^{-2}$$

$$D \left(\frac{8}{x} + \frac{8}{34} + \frac{3}{4} \right) = -\frac{8}{x^2} - \frac{8}{34}x^{-2} + \frac{3}{4}$$

"

"

"

Kh" {qw"pggf"vjku"fqew o gpv"kp"cpqvjgt"hqt o cv."rngcug"g o ckn"

Tqwpf"32"

"

Ukpeg"vjg"uw o "qh"vjg"uswctgu"qh"vjg"ukfgu"qh"c"tki jv"vtkcping"ku"79:."yg"jcxg" $a^4 b^4 c^4$ 79:0""

Uwduvkvwvki" $a^4 b^4$ hqt" c^4 "ikxgu" $a^4 b^4 a^4 b^4$ 79:0""Eq o d k p k p i "v g t o u" i k x g u" $4a^4 4b^4$ 79: c p f"

$a^4 b^4$ 4:; """"*3+0"

Ukpeg"vjg"rgtk o g v g t "q h "v j g "t k i j v "v t k c p i n g "k u "62."y g "j c x g" $a b c$ 62 0""Uwduvkvwvki"hqt"i k x g u"

√

Kh" { q w " p g g f " v j k u " f q e w o g p v " k p " c p q v j g t " h q t o c v . " r n g c u g " g o c k n " [o k p u w 0 m k o B w p i 0 g f w](#) " q t " e c m " 89 : / 939 / 57680 "

"