

Math 2 - Test Review - U2A - Quads

Solve by fact

① ± 8

② $8x^2 - 2x - 3 = 0$

③ $x^2 + 3x - 40 = 0$

$(4x - 3)(2x + 1) = 0$

$(x + 8)(x - 5) = 0$

$3/4 \quad -1/2$

$-8 \quad 5$

④ $(2x + 1)(x + 1) = 0$

$-1/2 \quad -1$

⑤ $4x^2 - 8x - 3 = 0$

$(2x -) (2x -) = 0$

⑥ $3x^2 + 6x - 42 = 0$

$3(x^2 + 2x - 14) = 0$

not factorable

not factorable anywhere

$8 \pm \sqrt{64 - 4(2)(-3)}$

8

$-6 \pm \sqrt{36 - 4(3)(-14)}$

6

$\frac{8 \pm \sqrt{64 + 48}}{8} = \frac{\sqrt{112}}{2.51}$

$\frac{-6 \pm \sqrt{504}}{6}$

⑬ $\frac{-5 \pm \sqrt{25 - 4(2)(3)}}{4}$

$\frac{-5 \pm 1}{4} \quad -1 \quad -3/2$

⑭ $\frac{-1 \pm \sqrt{1 - 4(2)(-6)}}{4}$

$\frac{-1 \pm 7}{4} \quad 3/2 \quad -2$

⑮ $\frac{2 \pm \sqrt{4 - 4(3)(-5)}}{6}$

$\frac{2 \pm 8}{6} \quad 5/3 \quad -1$

⑰ $\frac{2 \pm \sqrt{4 - 4(1)(5)}}{2}$

$\frac{2 \pm \sqrt{-16}}{-2}$ no real sol'n

⑲ $\frac{-6 \pm \sqrt{36 - 4(-2)(4)}}{-4}$

$\frac{-6 \pm \sqrt{36 + 32}}{-4} = \frac{-6 \pm \sqrt{108}}{-4} = \frac{-6 \pm 6\sqrt{3}}{-4}$

$\frac{-3 \pm 3\sqrt{3}}{-2}$

⑳ $-b$ @ start is -1 , should be $+1$

c is plugged as 6 , should be -6 .

calc: -1.098

17) 21: 1, 3, 7, 21
 45: 1, 3, 5, 9, 15, 45 3

GCF

12) 4 13) 5 14) 5 15) 29t 16) $7y^2$ 17) $3xy$

Factor 18) $10a(a+4)$

19) $5wx(3-7x)$

20) $mn(15n+2)$

21) $8y(2y+1)$

22) $6xy(7x^2+2)$

31) $(3x+2)(x-3)$

32) $(4x-1)(x-6)$

33) $6(3v^2+4v+2)$

34) $(4m+1)(2m-3)$

35) $(x+3)(x-3)$

36) $(a+8)(a-8)$

24) $(b+2)(b+1)$

25) $(a-12)(a+3)$

26) $(x-8)(x+3)$

40) $(13-4t)(13+4t)$

41) $(x+6)^2$

42) $(a+2)^2$

43) ~~x~~ prime

44) $(2n-5)^2$

45) $(x+15)^2$