Algebra 2 CC   Name_____

Unit 3: Rational Simpliy & Solving Test   Date_____ Period_____

Simplify each and state the excluded values.

1) $\dfrac{x^2 + 12x + 32}{x^2 + 3x - 4}$

  A) $\dfrac{x - 8}{x - 7}$; $\{-3, 7\}$

  B) $\dfrac{2(x - 5)}{3x - 10}$; $\left\{0, \dfrac{10}{3}\right\}$

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  D) $\dfrac{x - 7}{x - 8}$; $\{-3, 8\}$

2) $\dfrac{7v - 49}{v^2 + 3v - 70}$

  A) 1 ; $\{-8, 10\}$

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  C) $\dfrac{v - 1}{v + 6}$; $\{-6, 4\}$

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4) $\dfrac{\dfrac{3x^2}{9x^3 + 15x^2}}{\dfrac{x - 3}{15x + 25}}$

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5) $\dfrac{7k^3 + 28k^2}{7k^2} \cdot \dfrac{4k}{k + 4}$

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6) $\dfrac{2x - 6}{12x - 36} \cdot \dfrac{10x - 40}{10x - 30}$

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7) $\dfrac{5r - 15}{6r} = \dfrac{2}{3} + \dfrac{1}{r}$

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