Algebra 2

Name_____ ID: 1

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{n^2 + 4n - 5}{n^2 + 6n + 5}$

Simplify each expression.

2) $\dfrac{4n - 20}{n^2 - 15n + 50} \cdot \dfrac{n^2 - 18n + 80}{4n + 8}$

3) $\dfrac{20r - 70}{10r - 35} \div \dfrac{10r^2 + 70r}{10r}$

4) $\dfrac{2}{n - 2} + \dfrac{4n}{5n - 3}$

5) $\dfrac{5}{n + 1} - \dfrac{4}{n - 5}$

Answers to 7.1-7.2 Station Walk (ID: 1)

1) $\dfrac{n-1}{n+1}$; $\{-5, -1\}$

2) $\dfrac{n-8}{n+2}$

3) $\dfrac{2}{r+7}$

4) $\dfrac{4n^2 + 2n - 6}{(n-2)(5n-3)}$

5) $\dfrac{n-29}{(n-5)(n+1)}$

Algebra 2

Name_____ ID: 2

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{4k^2 + 8k}{6k^2 - 16k}$

Simplify each expression.

2) $\dfrac{56v - 16}{12v^3 + 28v^2} \cdot \dfrac{21v + 49}{49v - 14}$

3) $\dfrac{n^2 - 4n - 21}{n - 1} \div \dfrac{n^2 - n - 12}{n^2 - 5n + 4}$

4) $\dfrac{6}{n + 6} + \dfrac{4}{n + 2}$

5) $\dfrac{4}{3x - 5} - \dfrac{3x}{x + 6}$

Answers to 7.1-7.2 Station Walk (ID: 2)

1) $\dfrac{2(k+2)}{3k-8}$; $\left\{0, \dfrac{8}{3}\right\}$

2) $\dfrac{2}{v^2}$

3) $n-7$

4) $\dfrac{10n+36}{(n+6)(n+2)}$

5) $\dfrac{-9x^2+19x+24}{(3x-5)(x+6)}$

Name_____ ID: 3

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{18n^2 + 72n}{18n^2 - 18n}$

Simplify each expression.

2) $\dfrac{5n + 45}{n - 8} \cdot \dfrac{32 - 4n}{4n + 36}$

3) $\dfrac{5x^2 - 30x}{x - 3} \div \dfrac{x^2 + 2x - 48}{3x - 9}$

4) $\dfrac{n - 6}{15n^2 - 18n} + \dfrac{6}{3}$

5) $\dfrac{4}{2p} - \dfrac{3p}{3p^2 + 15p}$

Answers to 7.1-7.2 Station Walk (ID: 3)

1) $\dfrac{n+4}{n-1}$; $\{0,\ 1\}$

2) -5

3) $\dfrac{15x}{x+8}$

4) $\dfrac{30n^2 - 35n - 6}{3n(5n-6)}$

5) $\dfrac{p+10}{p(p+5)}$

Algebra 2

Name_____ ID: 4

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{4n + 24}{n^2 + 13n + 42}$

Simplify each expression.

2) $\dfrac{x^2 - 5x + 4}{2x - 8} \cdot \dfrac{2x - 8}{x - 4}$

3) $\dfrac{15x - 40}{x - 4} \div \dfrac{30x^2 - 80x}{x^2 - 6x + 8}$

4) $\dfrac{5b}{2} + \dfrac{2b}{2b + 12}$

5) $4x - \dfrac{x + 6}{9x^3 - 36x^2}$

Answers to 7.1-7.2 Station Walk (ID: 4)

1) $\dfrac{4}{n+7}$; $\{-7, -6\}$

2) $x - 1$

3) $\dfrac{x - 2}{2x}$

4) $\dfrac{5b^2 + 32b}{2(b + 6)}$

5) $\dfrac{36x^4 - 144x^3 - x - 6}{9x^2(x - 4)}$

Algebra 2

Name_____ ID: 5

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{6x - 48}{x^2 - 5x - 24}$

Simplify each expression.

2) $\dfrac{v - 4}{v^2 - 8v + 15} \cdot \dfrac{v^2 - 4v - 45}{v^2 + v - 20}$

3) $\dfrac{30n^2 - 3n^3}{7n^3 - 70n^2} \div \dfrac{7}{7n^3 - 14n^2}$

4) $5 + \dfrac{a + 4}{12a^2 + 8a}$

5) $\dfrac{5k}{4} - \dfrac{6k}{5k - 6}$

Answers to 7.1-7.2 Station Walk (ID: 5)

1) $\dfrac{6}{x+3}$; $\{8, -3\}$

2) $\dfrac{v-9}{(v-5)(v-3)}$

3) $-\dfrac{3n^2(n-2)}{7}$

4) $\dfrac{60a^2 + 41a + 4}{4a(3a+2)}$

5) $\dfrac{25k^2 - 54k}{4(5k-6)}$

Name_____ ID: 6

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{x^2 - 12x + 32}{x^2 - 5x + 4}$

Simplify each expression.

2) $\dfrac{16 + 6n - n^2}{n + 10} \cdot \dfrac{10n + 100}{n^2 - 14n + 48}$

3) $\dfrac{x^2 - 8x + 12}{x^2 - 2x - 24} \div \dfrac{x - 2}{10x + 20}$

4) $\dfrac{k - 3}{2k + 10} + \dfrac{4k}{3k}$

5) $\dfrac{6}{3n + 3} - \dfrac{5n}{n + 2}$

Answers to 7.1-7.2 Station Walk (ID: 6)

1) $\dfrac{x-8}{x-1}$; $\{4, 1\}$

2) $-\dfrac{10(2+n)}{n-6}$

3) $\dfrac{10(x+2)}{x+4}$

4) $\dfrac{11k+31}{6(k+5)}$

5) $\dfrac{-3n+4-5n^2}{(n+2)(n+1)}$

Name_____ ID: 7

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{n^2 + 11n + 28}{9n^3 + 36n^2}$

Simplify each expression.

2) $\dfrac{p+1}{p^2 + 5p - 36} \cdot \dfrac{3p^2 - 9p}{p^2 - 2p - 3}$

3) $\dfrac{r+6}{r^2 + 16r + 60} \div \dfrac{24}{2r + 20}$

4) $\dfrac{5}{2} + \dfrac{x+4}{2x + 12}$

5) $\dfrac{2a - 5}{3a + 4} - \dfrac{2a}{a - 4}$

Answers to 7.1-7.2 Station Walk (ID: 7)

1) $\dfrac{n+7}{9n^2}$; $\{0, -4\}$

2) $\dfrac{3p}{(p-4)(p+9)}$

3) $\dfrac{1}{12}$

4) $\dfrac{3x+17}{x+6}$

5) $\dfrac{-4a^2 - 21a + 20}{(a-4)(3a+4)}$

Name_____ ID: 8

7.1-7.2 Station Walk

Date_____ Period____

Simplify each and state the excluded values.

1) $\dfrac{x^2 - 2x + 1}{x^2 + 9x - 10}$

Simplify each expression.

2) $\dfrac{9x^3 - 63x^2}{9x^2} \cdot \dfrac{x^2 + 2x - 63}{x^2 + 8x - 9}$

3) $\dfrac{p^2 + 4p - 5}{9p^2 + 45p} \div \dfrac{p - 10}{9p^2 - 90p}$

4) $\dfrac{6}{m - 6} + \dfrac{m - 1}{m - 2}$

5) $\dfrac{x + 1}{x^2 + 7x + 6} - 5$

Answers to 7.1-7.2 Station Walk (ID: 8)

1) $\dfrac{x-1}{x+10}$; $\{1, -10\}$

2) $\dfrac{(x-7)^2}{x-1}$

3) $p-1$

4) $\dfrac{m^2-m-6}{(m-6)(m-2)}$

5) $\dfrac{-5x-29}{x+6}$