

Assignment

© 2012 Kuta Software LLC. All rights reserved.

Simplify each expression.

$$1) \frac{x+4}{5} \cdot \frac{x^2-13x+42}{28+3x-x^2}$$

$$2) \frac{9}{8r} \cdot \frac{8r^2+48r}{r+6}$$

$$3) \frac{(4-a)(a-9)}{3a(a-9)} \div \frac{a-4}{a+1}$$

$$4) \frac{n+7}{n+1} \div \frac{(n-7)(n+7)}{(n+8)(n+1)}$$

$$5) \frac{14 - 21n}{18n^2 - 12n} \div \frac{1}{6n}$$

$$6) \frac{5}{35p + 30} \div \frac{7}{42p + 36}$$

$$7) \frac{2n + 10}{n + 8} \div \frac{2n + 10}{3n^2}$$

$$8) \frac{5}{2x + 6} \div \frac{5}{2x + 14}$$

$$9) \frac{1}{x + 1} \div \frac{x - 2}{x^2 + 2x + 1}$$

$$10) \frac{1}{4v - 36} \div \frac{v + 9}{8v^2 + 72v}$$

$$11) \frac{1}{k+4} \div \frac{k+5}{k^2+5k+4}$$

$$12) \frac{x+6}{6x^2-20x} \div \frac{3}{6x^2-20x}$$

$$13) \frac{b-2}{2b^2-4b} + \frac{6b}{2}$$

$$14) \frac{6}{2r-1} + \frac{4r}{2r}$$

$$15) \frac{5}{4} + \frac{6n}{n+2}$$

$$16) \frac{6}{3} + \frac{x+2}{3x-6}$$

$$17) \frac{3m}{4} - \frac{m+6}{m+5}$$

$$18) 3 - \frac{a+5}{a^2-16}$$

$$19) \frac{5x}{x-2} - \frac{3x}{x+3}$$

$$20) \frac{3n}{n+1} - \frac{6}{n+6}$$

$$21) \frac{k-3}{4k^3+20k^2} + 6$$

$$22) \frac{4}{v-3} + \frac{5}{3v+2}$$

Answers to Assignment (ID: 1)

$$1) -\frac{(x-6)}{5}$$

$$5) -7$$

$$9) \frac{x+1}{x-2}$$

$$13) \frac{6b^2+1}{2b}$$

$$17) \frac{3m^2+11m-24}{4(m+5)}$$

$$21) \frac{24k^3+120k^2+k-3}{4k^2(k+5)}$$

$$2) 9$$

$$6) \frac{6}{7}$$

$$10) \frac{2v}{v-9}$$

$$14) \frac{4r+4}{2r-1}$$

$$18) \frac{3a^2-53-a}{(a-4)(a+4)}$$

$$22) \frac{17v-7}{(v-3)(3v+2)}$$

$$3) -\frac{(a+1)}{3a}$$

$$7) \frac{3n^2}{n+8}$$

$$11) \frac{k+1}{k+5}$$

$$15) \frac{29n+10}{4(n+2)}$$

$$19) \frac{2x^2+21x}{(x-2)(x+3)}$$

$$4) \frac{n+8}{n-7}$$

$$8) \frac{x+7}{x+3}$$

$$12) \frac{x+6}{3}$$

$$16) \frac{7x-10}{3(x-2)}$$

$$20) \frac{3n^2+12n-6}{(n+6)(n+1)}$$