

Algebra 1.5

© 2012 Kuta Software LLC. All rights reserved.

Simplify each expression.

1) $\frac{2}{2n} \div \frac{4}{14}$

2) $\frac{16}{2} \cdot \frac{18x}{9x}$

3) $\frac{2p}{4} \div \frac{19}{14p^2}$

4) $\frac{16}{20m} \cdot \frac{4}{19m^2}$

5) $\frac{17k}{10k^2} \div \frac{4k^3}{15k}$

6) $\frac{v^2 - 16}{v + 6} \cdot \frac{1}{v + 4}$

$$7) \frac{6x^2 + 30x}{x + 5} \cdot \frac{8x}{4x^2}$$

$$8) \frac{k - 3}{5k^2 - 15k} \div \frac{1}{k - 6}$$

$$9) \frac{6n^2}{6} \div \frac{1}{6n + 12}$$

$$10) \frac{7}{b^2 - 11b + 28} \div \frac{3}{3b - 12}$$

$$11) \frac{2x^2}{4x^3 - 4x^2} \div \frac{1}{4x^2}$$

$$12) \frac{x^2 - 9x + 8}{x - 1} \div \frac{x - 8}{x - 5}$$

$$13) \frac{r - 2}{r^2 - 8r + 16} \div \frac{1}{r - 4}$$

$$14) \frac{n - 7}{n^2 - 9n + 14} \div \frac{1}{4n}$$

$$15) \frac{7}{49-7a} \cdot \frac{a^2-49}{a+3}$$

$$16) \frac{36-20m}{4} \div \frac{35m^2-23m-72}{7m^2+43m+40}$$

$$17) \frac{2n-5}{8n-16} \div \frac{2n^2-11n+15}{8n+24}$$

$$18) \frac{7}{50-70p} \cdot \frac{42p-30}{7p+42}$$

$$19) \frac{5-5n}{7n^2+60n-100} \div \frac{30n^3-30n^2}{7n^2+60n-100}$$

$$20) \frac{45x^3-81x^2}{25x^2-5x-72} \cdot \frac{45x^2+72x}{9x}$$