

9.2 practice

Date _____ Period _____

Simplify each and state the excluded values.

1) $\frac{1}{5p^2} \div \frac{p+1}{p^2+3p+2}$

2) $\frac{10b^2-30b}{b^2+4b-21} \cdot \frac{2b}{10b}$

3) $\frac{n^2+15n+56}{n+7} \cdot \frac{6n^2}{n+8}$

4) $\frac{9}{n^2-5n+4} \cdot \frac{5n^3-20n^2}{9}$

5) $\frac{5x-10}{x^2-6x+8} \div \frac{1}{x-4}$

6) $\frac{x+3}{6x^2+18x} \div \frac{1}{x-5}$

7) $\frac{a+10}{a^2+14a+48} \div \frac{a-10}{a+6}$

8) $\frac{2n}{n^2-17n+72} \div \frac{2n^2}{2n^3-16n^2}$

9) $\frac{k^2-17k+72}{k-8} \div \frac{10k-90}{k+8}$

10) $\frac{r+9}{r^2+r-72} \cdot \frac{4r-32}{10}$

11) $\frac{2x+5}{10x^2+27x+5} \div \frac{x+9}{5x^2+21x+4}$

12) $\frac{2x^2+17x+30}{6x^2+23x+20} \cdot \frac{3x+4}{5}$

13) $\frac{1}{n+4} \cdot \frac{7n^2-20n+12}{7n-6}$

14) $\frac{8x+8}{10x^2+6x-4} \div \frac{4}{5x-2}$

Answers to 9.2 practice (ID: 1)

- 1) $\frac{p+2}{5p^2}; \{0, -2, -1\}$ 2) $\frac{2b}{b+7}; \{3, -7, 0\}$ 3) $6n^2; \{-7, -8\}$ 4) $\frac{5n^2}{n-1}; \{4, 1\}$
- 5) $5; \{4, 2\}$ 6) $\frac{x-5}{6x}; \{0, -3, 5\}$ 7) $\frac{a+10}{(a+8)(a-10)}; \{-8, -6, 10\}$
- 8) $\frac{2n}{n-9}; \{9, 8, 0\}$ 9) $\frac{k+8}{10}; \{8, -8, 9\}$ 10) $\frac{2}{5}; \{8, -9\}$
- 11) $\frac{x+4}{x+9}; \left\{-\frac{5}{2}, -\frac{1}{5}, -4, -9\right\}$ 12) $\frac{x+6}{5}; \left\{-\frac{5}{2}, -\frac{4}{3}\right\}$ 13) $\frac{n-2}{n+4}; \left\{-4, \frac{6}{7}\right\}$
- 14) $1; \left\{\frac{2}{5}, -1\right\}$