

2A.1 - Homework

Simplify each expression AND state the excluded values when appropriate (only for simplifying).

1) $\frac{2p^2 - 23p + 45}{6p^3 - 54p^2}$

2) $\frac{7p^2 - 39p - 18}{3p^2 - 25p + 42}$

3) $\frac{15n - 15}{15n^3 - 15n^2} \cdot \frac{3n^2}{n^2 + 4n - 5}$

4) $\frac{24p + 24}{4p} \div \frac{24p + 24}{4p^2 - 4p}$

5) $\frac{3x^2 + 10x + 3}{6x^2 + 2x} \div \frac{9x + 6}{3x + 2}$

6) $\frac{2x^2 - 12x + 18}{12x - 36} \div \frac{7x + 8}{42x + 48}$

7) $\frac{x^2 - 11x + 30}{15x^3 + 21x^2} \cdot \frac{20x + 28}{4}$

8) $\frac{m^2 - 1}{5m + 7} \div \frac{40m^2 + 48m}{25m^2 + 65m + 42}$

$$9) \frac{3v+2}{6v^2+10v+4} \cdot \frac{2v^2+10v+8}{4v^2-32v}$$

$$10) \frac{10x-30}{2x^2-12x+18} \cdot \frac{8x+32}{8}$$

$$11) \frac{11}{14b^5} \cdot \frac{12b}{15b^4}$$

$$12) \frac{7x^5y^4}{14xy} \div \frac{10}{2x^3y}$$

$$13) \frac{\frac{x+2}{x+1}}{\frac{x+2}{x-4}}$$

$$14) \frac{\frac{5}{2x+1}}{\frac{25}{2x+1}}$$

$$15) \frac{\frac{u+2}{u}}{u^2}$$

$$16) \frac{\frac{16}{u}}{\frac{3}{2}}$$