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Review of 9-1 to 9-2

 Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Block\_\_\_\_\_\_\_

**1-12: Simplify each expression.**

**2.** $\frac{8y^{2}(y^{6})^{3}}{4y^{24}}$

**3.** $\frac{3a^{2} - 24a}{3a^{2} + 12a}$

**1.** $\frac{x^{2} - 4}{\left(x - 2\right)\left(x + 1\right)}$

**4.** $\frac{5r^{2}}{r^{2} - 4}∙\frac{r + 2 }{10r^{5}}$

**6.** $\frac{3x^{2}}{x + 2}÷\frac{3x}{x^{2} - 4}$

**5.** $\frac{24g^{3}}{5f^{2}}∙\frac{10(gf)^{3}}{8g^{5}f}$

**7.** $\frac{q^{2} + 2q}{6q}÷\frac{q^{2} - 4}{3q^{2}}$

**8.** $\frac{t^{2} + 19t + 84}{4t - 4}∙\frac{2t - 2}{t^{2} + 9t + 14}$

**9.** $\frac{16a^{2} + 40a + 25}{3a^{2} - 10a - 8}÷\frac{4a + 5}{a^{2} - 8a + 16}$

**10.** $\frac{\frac{c^{2}y}{2d^{2}}}{\frac{-c^{6}}{5d}}$

**11.** $\frac{\frac{a^{2} - b^{2}}{4a}}{\frac{a + b}{2a}}$

**12.** $\frac{\frac{x - 4}{x^{2} + 6x + 9}}{\frac{x^{2} - 2x - 8}{3 + x}}$

**13-15: Find the LCM of each set of polynomials.**

**14.** 18*a*3*bc*2, 24*b*2*c*2

**15.** *x*2 – 3*x* – 4, *x* + 1

**13.** 12*c*, 6*c*2*d*

**16-24: Simplify each expression.**

**16.** $\frac{3}{8p^{2}r}+\frac{5}{4p^{2}r}$

**17.** $\frac{2}{a + 2}-\frac{3}{2a}$

**18.** $\frac{1}{x^{2} + 2x + 1}+\frac{x}{x + 1}$

**20.** $\frac{7}{4gh}+\frac{3}{4h^{2}}$

**21.** $\frac{n}{n - 3}+\frac{2n + 2}{n^{2} - 2n - 3}$

**19.** $\frac{4z}{z - 4}+\frac{z + 4}{z + 1}$

**23.** $\frac{k}{k - n}-\frac{k}{n - k}$

**22.** $\frac{3}{y^{2} + y - 12}-\frac{2}{y^{2} + 6y + 8}$

**24.** $\frac{2c - 7}{3}+4$