Divide Rational Expressions

Divide the rational expressions.

$$\frac{y-8}{y^2+y-72} \div \frac{7y}{y-12}$$

$$\frac{p+8}{p^2+20p+96} \div \frac{5p}{p-2}$$

$$\frac{q-9}{q^2-5q-36} \div \frac{7q}{q-3}$$

$$\frac{30s^2+24s+72}{80s^2-76s-24} \div \frac{s^2}{32s^2-64s-18}$$

$$\frac{q+10}{q^2+15q+50} \div \frac{4q}{q+9}$$

$$\frac{h+11}{h^2+15h+44} \div \frac{12h}{h-10}$$

Divide Rational Expressions

Divide the rational expressions.

$$\frac{y-8}{y^2+y-72} \div \frac{7y}{y-12}$$

$$= \frac{y-12}{7y(y+9)}$$

$$\frac{p+8}{p^2+20p+96} \div \frac{5p}{p-2}$$

$$= \frac{p-2}{5p(p+12)}$$

$$\frac{q-9}{q^2-5q-36} \div \frac{7q}{q-3}$$

$$= \frac{q-3}{7q(q-4)}$$

$$\frac{30s^2+24s+72}{80s^2-76s-24} \div \frac{s^2}{32s^2-64s-18}$$

$$= \frac{3(s+2)(4s-9)}{s^2}$$

$$\frac{q+10}{q^2+15q+50} \div \frac{4q}{q+9}$$

$$= \frac{q+9}{4q(q+5)}$$

$$\frac{h+11}{h^2+15h+44} \div \frac{12h}{h-10}$$

$$= \frac{h-10}{12h(h+4)}$$