

Name : _____ Score : _____

Teacher : _____ Date : _____

Multiplying and Dividing Rational Expressions

Simplify each expression.

$$1) \frac{5q + 5}{q^2 + 19q + 88} \cdot \frac{q + 8}{5q + 5}$$

$$6) \frac{6d^2}{4} \div \frac{11d}{2}$$

$$2) \frac{9}{11} \cdot \frac{2}{5n}$$

$$7) \frac{8(r - 4)}{(r - 4)} \cdot \frac{9r}{8(r - 2)}$$

$$3) \frac{y^2 + 20y + 96}{y^2 + 14y + 24} \div \frac{1}{y + 2}$$

$$8) \frac{10}{(h + 4)} \cdot \frac{11h - 77}{(h - 7)}$$

$$4) \frac{30g^2 - 25g - 20}{33g^2 - 20g - 32} \div \frac{g^2}{66g^2 - 84g - 96}$$

$$9) (z - 3) \cdot \frac{7z}{z^2 - 4z + 3}$$

$$5) \frac{s^2 + 3s + 2}{7s} \div (s + 1)$$

$$10) \frac{4(b + 10)}{10} \cdot \frac{2b}{4(b + 10)}$$

