Name : _____

MATH MONKS

Multiplying Rational Expressions

1. $\frac{3x^2}{2y} \cdot \frac{4y^3}{3x}$

2. $\frac{1}{p + 10} \cdot \frac{10p + 30}{p + 3}$

3. $\frac{x + 1}{3x + y} \cdot \frac{9x^2 - y^2}{2x^2 + 3x + 1}$

4. $\frac{m^2 - n^2}{4m + 4n} \cdot \frac{m + n}{m - n}$

5. $\frac{15s - 50}{3s - 10} \cdot \frac{9s}{5}$

6. $\frac{8(q + 1)}{7q} \cdot \frac{9}{8(q + 1)}$

7. $\frac{4n - 24}{n - 6} \cdot \frac{1}{n - 9}$

8. $\frac{(x + 2)^2}{6x^2} \cdot \frac{3x}{x^2 - 4}$

9. $\frac{5x^3}{4x - 8} \cdot \frac{6x - 12}{10x}$

10. $\frac{y + 3}{10y + 20} \cdot \frac{y + 2}{y^2 + 4y + 3}$

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MATH MONKS

Multiplying Rational Expressions

Answers

1. $\frac{3x^2}{2y} \cdot \frac{4y^3}{3x}$

Ans: $2xy^2$

2. $\frac{1}{p+10} \cdot \frac{10p+30}{p+3}$

Ans: $\frac{10}{p+10}$

3. $\frac{x+1}{3x+y} \cdot \frac{9x^2-y^2}{2x^2+3x+1}$

Ans: $\frac{3x-y}{2x+1}$

4. $\frac{m^2-n^2}{4m+4n} \cdot \frac{m+n}{m-n}$

Ans: $\frac{m+n}{4}$

5. $\frac{15s-50}{3s-10} \cdot \frac{9s}{5}$

Ans: $9s$

6. $\frac{8(q+1)}{7q} \cdot \frac{9}{8(q+1)}$

Ans: $\frac{9}{7q}$

7. $\frac{4n-24}{n-6} \cdot \frac{1}{n-9}$

Ans: $\frac{4}{n-9}$

8. $\frac{(x+2)^2}{6x^2} \cdot \frac{3x}{x^2-4}$

Ans: $\frac{x+2}{2x(x-2)}$

9. $\frac{5x^3}{4x-8} \cdot \frac{6x-12}{10x}$

Ans: $\frac{3x^2}{4}$

10. $\frac{y+3}{10y+20} \cdot \frac{y+2}{y^2+4y+3}$

Ans: $\frac{1}{10(y+1)}$