Climb The Ladder A

Multiply & Divide Rational Expressions

$$1. \quad \frac{(-2ab^2)^3}{20ab^4}$$

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

$$3 - \frac{24g^3}{5f^2} \cdot \frac{10(gf)^3}{8g^5f}$$

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

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Climb The Ladder B

Multiply & Divide Rational Expressions

1.
$$\frac{3m^3 - 3m}{6m^4} \cdot \frac{4m^5}{m+1}$$
 2. $\frac{x^2 + x - 6}{x^2 - 6x - 27}$

$$\frac{x^2 + x - 6}{x^2 - 6x - 27}$$

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

4.
$$\frac{3a^2 - 24a}{3a^2 + 12a}$$

Climb The Ladder B

Multiply & Divide Rational Expressions

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

Climb The Ladder C

Multiply & Divide Rational Expressions

1.
$$\frac{\frac{c^2y}{2d^2}}{\frac{-c^6}{5d}}$$

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

3.
$$\frac{x^2-5x+4}{2x-8} \div (3x^2-3x)$$

3.
$$\frac{x^2 - 5x + 4}{2x - 8} \div (3x^2 - 3x)$$
 4. $\frac{16a^2 + 40a + 25}{3a^2 - 10a - 8} \div \frac{4a + 5}{a^2 - 8a + 16}$

Climb The Ladder C

Multiply & Divide Rational Expressions

1.
$$\frac{\frac{c^2y}{2d^2}}{\frac{-c^6}{5d}}$$

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

3.
$$\frac{x^2 - 5x + 4}{2x - 8} \div (3x^2 - 3x)$$

3.
$$\frac{x^2 - 5x + 4}{2x - 8} \div (3x^2 - 3x)$$
 4. $\frac{16a^2 + 40a + 25}{3a^2 - 10a - 8} \div \frac{4a + 5}{a^2 - 8a + 16}$

Climb The Ladder D

Find the LCM of each set of polynomials.

1
$$14ab^2$$
, $42bc^3$, $18a^2c$

2.
$$8cdf^3$$
, $28c^2f$, $35d^4f^2$

3.
$$x^2 + 3x$$
, $10x^2 + 25x - 15$

4.
$$22x^2 + 66x - 220, 4x^2 - 16$$

Climb The Ladder D

Find the LCM of each set of polynomials.

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$$14ab^2$$
, $42bc^3$, $18a^2c$

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$$8cdf^3$$
, $28c^2f$, $35d^4f^2$

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, $10x^2 + 25x - 15$

4.
$$22x^2 + 66x - 220, 4x^2 - 16$$

Climb The Ladder E
T8-2: I can add and subtract rational expressions.

$$1. \quad \frac{3}{x} + \frac{5}{y}$$

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

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

$$4. \qquad \frac{5}{3b+d} - \frac{2}{3bd}$$

Climb The Ladder E
T8-2: I can add and subtract rational expressions.

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$$\frac{3}{x} + \frac{5}{y}$$

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$$4. \qquad \frac{5}{3b+d} - \frac{2}{3bd}$$

Climb the Ladder F

T8-2: I can add and subtract rational expressions.

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

$$2. \qquad \frac{1}{x^2 + 2x + 1} + \frac{x}{x + 1}$$

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

$$\frac{3t}{2-x} + \frac{5}{x-2}$$

Climb the Ladder F

T8-2: I can add and subtract rational expressions.

$$1. \qquad \frac{4z}{z-4} + \frac{z+4}{z+1}$$

$$2. \qquad \frac{1}{x^2 + 2x + 1} + \frac{x}{x + 1}$$

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

$$\frac{3t}{2-x} + \frac{5}{x-2}$$

Climb the Ladder G

T8-3 I can solve rational equations.

1.
$$\frac{2y}{3} - \frac{y+3}{6} = 2$$

$$2. \quad \frac{2x+1}{3} - \frac{x-5}{4} = \frac{1}{2}$$

3.
$$\frac{3m+2}{5m} + \frac{2m-1}{2m} = 4$$

4.
$$\frac{4}{x-1} = \frac{x+1}{12}$$

Climb the Ladder G

T8-3 I can solve rational equations.

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$$\frac{2y}{3} - \frac{y+3}{6} = 2$$

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3.
$$\frac{3m+2}{5m} + \frac{2m-1}{2m} = 4$$

4.
$$\frac{4}{x-1} = \frac{x+1}{12}$$

Climb the Ladder H

T8-3 I can solve rational equations.

1.
$$8 - \frac{4}{z} = \frac{8z - 8}{z + 2}$$

$$\frac{1}{w+2} + \frac{1}{w-2} = \frac{4}{w^2-4}$$

3.
$$\frac{-12}{y} = y - 7$$

4.
$$\frac{c+1}{c-3} = 4 - \frac{12}{c^2 - 2c - 3}$$

Climb the Ladder H

T8-3 I can solve rational equations.

1.
$$8 - \frac{4}{z} = \frac{8z - 8}{z + 2}$$

2.
$$\frac{1}{w+2} + \frac{1}{w-2} = \frac{4}{w^2-4}$$

$$3. \quad \frac{-12}{y} = y - 7$$

4.
$$\frac{c+1}{c-3} = 4 - \frac{12}{c^2 - 2c - 3}$$