

Factors.

Thursday, March 5, 2020 12:10 PM

$$\begin{array}{r} 12 \\ \times \\ 3 \times 4 \\ 1 \quad \wedge \\ \underline{3 \times 2 \times 2} \end{array} \text{ prime factors}$$

$$\begin{array}{r} 60 \\ \wedge \\ 6 \times 10 \\ \wedge \quad \wedge \\ (2) \times (3) \times (2) \times 5 \\ \wedge \quad \wedge \quad \wedge \quad \wedge \\ 72 \\ \wedge \quad \wedge \\ 8 \times 9 \\ \wedge \quad \wedge \quad \wedge \quad \wedge \\ (2) \times (2) \times (2) \times (3) \times (3) \end{array}$$

$$\begin{aligned} \text{GCF} &= 2 \times 3 \times 2 \\ &= 12 \end{aligned}$$

LCM

$$8, 16, 24, 32, 40, 48, \dots$$
$$10, 20, 30, 40, 50$$

$$\frac{1}{8} + \frac{1}{10}$$

$$\begin{array}{r} 8 \\ \wedge \\ 2 \times 2 \times 2 \\ \hline 10 \\ \wedge \\ 2 \times 5 \\ \hline \end{array}$$

$$\text{LCM} = \sqrt{2 \times 2 \times 2 \times 5} = 40$$

GCF of x^3 , x^5

Find GCF of $12x^3y^5$ and $20x^2y^4$

$$\text{GCF} = 4x^2y^4$$

polynomial

$$\underbrace{2x}_{\text{term}} + \underbrace{3y} + \underbrace{4y^2} + \underbrace{2} + \underbrace{x} + \underbrace{3x^2y^3}$$

$$\underbrace{3x}_{\text{factor}} (\underbrace{2x - 7}_{\text{factor}})$$

$$6x^2 - 21x$$

$$\underbrace{3 \times 2 \times 2}_{12}$$

Factor $\frac{16x^2y^3}{8 \times y^3} - \frac{8xy^4}{8 \times y^3}$

① Find GCF: $\underbrace{8xy^3}_{\text{GCF}} (\underbrace{2x - y}_{\text{what is left after we divide by GCF}})$

what is left after we divide by GCF

B.F. $27m^3n - 15m^2n^3$

$$\text{GCF} = 3m^2n$$

$$13f.) \frac{27m^3n}{3m^2n} - \frac{15m^2n^3}{3m^2n}$$

$$GCF = 3m^2n$$

$$3m^2(9m - 5n^2)$$

$$12e.) 9a^3 + 7a^2 + 18a$$

$$a(9a^2 + 7a + 18)$$

$$13a.) \frac{25xy}{5x} + \frac{15x^2}{5x}$$

$$5x(5y + 3x)$$