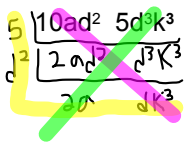
$$\frac{3v^3}{10ad^2}+\frac{a^2u}{5d^3k^3}$$

LCD:



$$\frac{dk^3}{dk^3}\cdot\frac{3v^3}{10ad^2}+\frac{a^2u}{5d^3k^3}\cdot\frac{2a}{2a}$$

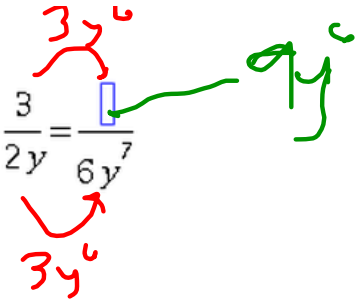
$$\frac{3dk^3v^3+2a^3u}{10ad^3k^3}$$

We work as follows.

$$\frac{3v^3}{10ad^2}+\frac{a^2u}{5d^3k^3}$$
$$=\left(\frac{3v^3}{10ad^2}\right)\left(\frac{dk^3}{dk^3}\right)+\left(\frac{a^2u}{5d^3k^3}\right)\left(\frac{2a}{2a}\right)$$
$$=\frac{3dk^3v^3}{10ad^3k^3}+\frac{2a^3u}{10ad^3k^3}$$
$$=\frac{3dk^3v^3+2a^3u}{10ad^3k^3}$$

This fraction cannot be simplified.

The answer is $\frac{3dk^3v^3+2a^3u}{10ad^3k^3}$.



$$\frac{3}{2y}=\frac{\square}{6y^7}$$

Solve for s .

$$n = \frac{L}{p(r+s)}$$

$np(r+s) = L$

$r + s = L / (np)$

$s = L / (np) - r$

Solve for f .

$$h = \frac{8}{f} + \frac{7}{g}$$ *fg

$fgh = 8g + 7f$

$fgh - 7f = 8g$

$f(gh - 7) = 8g$

$f = 8g / (gh - 7)$

4. Computing a percent mixture

An alloy is a mixture of metals. Suppose that a certain alloy is made by mixing 140 grams of an alloy that contains 64% copper with 180 grams of pure copper.

Answer the questions below. Do not do any rounding.

(a) How many grams of copper are in the resulting mixture? grams 269.6
(b) What percentage of the resulting mixture is copper? % 84.25

$$140g * 64/100 + 180 = 269.6$$

$$\frac{269.6 \text{ copper}}{140 + 180 \text{ alloy}} \text{ x } 100 = 84.25$$

Solve.

$$4|x+1|-7 > 5$$

If all real numbers are solutions, click on "All reals".
If there is no solution, click on "No solution".

+7 + 7

$4 | x + 1 | > 12$

--- ---

4 4

great OR

$| x + 1 | > 3$

$x + 1 > 3$ or $-(x+1) > 3$

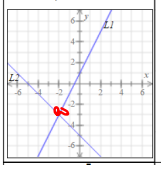
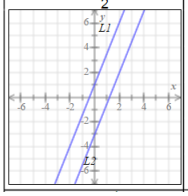
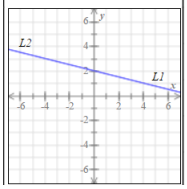
$x > 2$ or $-x - 1 > 3$

$-x > 4$

$x > 2$ or $x < -4$

20. Classifying systems of linear equations from graphs

For each system of linear equations shown below, classify the system as "consistent dependent," "consistent independent," or "inconsistent." Then, answer the question about its solutions.

$Line\,1: y = 2x + 1$ $Line\,2: y = -x - 5$ 	This system of equations is: ○ consistent dependent ✓ consistent independent ○ inconsistent	This means the system has: ✓ a unique solution Solution: (,) (-2,-3) ○ infinitely many solutions ○ no solution
$Line\,1: y = \frac{5}{2}x + 1$ $Line\,2: y = \frac{5}{2}x - 3$ 	This system of equations is: ○ consistent dependent ○ consistent independent ✓ inconsistent	This means the system has: ○ a unique solution Solution: (,) ○ infinitely many solutions ✓ no solution
$Line\,1: y = \frac{-1}{4}x + 2$ $Line\,2: x + 4y = 8$ 	This system of equations is: ✓ consistent dependent ○ consistent independent ○ inconsistent	This means the system has: ○ a unique solution Solution: (,) ✓ infinitely many solutions ○ no solution

Factor:

$12x^2 - xy - 6y^2$

AC:

$-6 * 12 = -72y^2$ $\quad 8y - 9y = -1y$

$12x^2 + 8xy - 9xy - 6y^2$

$-xy$

$4x(3x + 2y) - 3y(3x + 2y)$

$(3x + 2y)(4x - 3y)$

$12x^2 - x - 6$

ac= 12 * -6 = -72 < -9, 8

-1

$12x^2 - 9x + 8x - 6$

$3x(4x - 3) + 2(4x - 3)$

$(4x - 3)(3x + 2)$

Simplify.

$$\frac{u^2+6u-7}{4-4u^2} = \frac{(u+7)(u-1)}{4(1-u^2)}$$

$$= \frac{(u+7)(u-1)}{4(1-u)(1+u)}$$

$$= \frac{(u+7)}{-4(1+u)}$$

Multiply.

$$\frac{x+2}{3x-6}\cdot\frac{x^2-3x+2}{x-3} = \frac{(x+2)(x-1)(x-2)}{3(x-2)(x-3)}$$

$$= \frac{(x+2)(x-1)}{3(x-3)}$$

$$\frac{21x^2-2x-3}{4x-12} \div \frac{49x^2-9}{x-3} = \frac{(7x-3)(3x+1)}{4(x-3)} \cdot \frac{(x-3)}{(7x-3)(7x+3)}$$

$ac = -63 < \begin{matrix} -9 \\ 7 \\ \hline -2 \end{matrix}$

$$\frac{3x+1}{4(7x+3)}$$

$21x^2 - 9x + 7x - 3$

$3x(7x - 3) + 1(7x - 3)$

$(7x - 3)(3x + 1)$

60. Factoring a sum or difference of two cubes

Factor.

$8w^3+125$

w^3-27

You answered:

$(2w+5)(4w^2+14+25)$

$-10w$

$(w-3)(w^2+3w+9)$

Your answer is incorrect.

The correct answer is:

$$(2w+5)(4w^2-10w+25)$$

Subtract.

$$\frac{b}{b^2-9b+14}-\frac{7}{b^2-9b+14}$$

$$\frac{b-7}{b^2-9b+14}$$

$$\frac{b-7}{(b-7)(b-2)}$$

Peter

Maria

Alyssa

Eduardo

Ibrahim

Victoria

Gia

Kyle

Khristary

Jose