



Feb 3

Feb. bell ringer  
Simplify.

$$\frac{x+4 - \frac{1}{x+4}}{x+11 + \frac{48}{x-3}} = \boxed{\frac{x-3}{x+4}}$$

$$\left( \frac{x+4 - \frac{1}{x+4}}{x+11 + \frac{48}{x-3}} \right) \div \left( x+11 + \frac{48}{x-3} \right)$$

$$\frac{x^2+8x+16-1}{x+4} \div \frac{x^2+8x-33+48}{x-3}$$

$$\frac{\cancel{x^2+8x+15}}{x+4} \cdot \frac{x-3}{\cancel{x^2+8x+15}}$$

$$\frac{x-3}{x+4}$$

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Assignment

WS Review on

rational expressions

[omit # 30]

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40)

$$\left( \frac{y-12}{y-4} \right) \div \left( y - \frac{18}{y-3} \right)$$

$$\frac{y^2-4y-12}{y-4} \div \frac{y^2-3y-18}{y-3}$$

$$\frac{\cancel{(y-6)}(y+2)}{y-4} \div \frac{y-3}{\cancel{(y-6)}(y+3)}$$

$$\frac{(y+2)(y-3)}{(y-4)(y+3)}$$

38

$$\left( \frac{b}{b+3} + 2 \right) \div (b^2 - 2b - 8)$$

$$\frac{b + 2b + 6}{b + 3}$$

$$\frac{1}{b^2 - 2b - 8}$$

$$\frac{3b + 6}{b + 3}$$

$$\frac{1}{(b-4)(b+2)}$$

~~3(b+2)~~

1

$$\frac{5(b-2)}{b+3} \cdot \frac{1}{(b-4)(b+2)}$$

$$\frac{3}{(b+3)(b-4)}$$

42)

$$\frac{r^2 - 9r}{r^2 + 7r + 10}$$

$$\div \frac{r^2 + 5r}{r^2 + r - 2}$$

$$\frac{r(r-9)}{r^2 + 7r + 10}$$

$$\cdot \frac{1}{(r+2)(r-1)}$$

$$(r+5)(r+2) \quad \times (r+5)$$

$$\frac{(r-9)(r-1)}{(r+5)^2}$$

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22)

$$\frac{h-3}{h-5} - (h+2)$$

$$\frac{h-3 - (h^2 - 3h + 10)}{h-5}$$

$$h-3 - h^2 + 3h - 10$$

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$$h-5$$

$$-h^2 + 4h - 13$$

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$$h-5$$