

Agenda

1) Go over HW Questions

- Groups
- On board

2) Review Worksheets: Level 3 & 4

5.4: Objective: To Simplify Rational Algebraic Expressions

5.5: Objective: To Multiply and Divide Rational Expressions

3) Exit Ticket on 5.5

HW: Worksheet: "5-5 Products and Quotients of Rational Expressions" #1-22 Even

Level 3: Simplify each expression.

13)
$$\frac{27}{27x + 18}$$

14)
$$\frac{v^2 - 7v - 30}{v^2 - 5v - 24}$$

15)
$$\frac{x^2 + 8x + 12}{x^2 + 3x - 18}$$

16)
$$\frac{x^2 - 11x + 18}{x^2 + 2x - 8}$$

17)
$$\frac{b^2 + 3b - 28}{b^2 - 49}$$

18)
$$\frac{v^2 - 3v - 40}{v^2 - 11v + 24}$$

19)
$$\frac{4n - 4}{6n - 20}$$

20)
$$\frac{v^2 - 5v - 14}{v^2 + 4v + 4}$$

Level 3: ANSWER KEY

13) $\frac{27}{27x+18}$

$$\frac{3}{3x+2}$$

15) $\frac{x^2+8x+12}{x^2+3x-18}$

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

17) $\frac{b^2+3b-28}{b^2-49}$

$$\frac{b-4}{b-7}$$

19) $\frac{4n-4}{6n-20}$

$$\frac{2(n-1)}{3n-10}$$

14) $\frac{v^2-7v-30}{v^2-5v-24}$

$$\frac{v-10}{v-8}$$

16) $\frac{x^2-11x+18}{x^2+2x-8}$

$$\frac{x-9}{x+4}$$

18) $\frac{v^2-3v-40}{v^2-11v+24}$

$$\frac{v+5}{v-3}$$

20) $\frac{v^2-5v-14}{v^2+4v+4}$

$$\frac{v-7}{v+2}$$

Level 4: Simplify each expression.

21)
$$\frac{6v^3 + 42v^2}{2v^2 + 26v + 84}$$

22)
$$\frac{x^3 - x^2 - 42x}{2x^2 - 20x + 42}$$

23)
$$\frac{2v^2 + 10v - 48}{8v + 64}$$

24)
$$\frac{9x^2 + 81x}{x^3 + 8x^2 - 9x}$$

25)
$$\frac{x^2 + 2x - 80}{2x^3 - 24x^2 + 64x}$$

26)
$$\frac{3r^2 - 39r + 90}{r^2 - 3r - 70}$$

Level 4: ANSWER KEY

$$21) \frac{6v^3 + 42v^2}{2v^2 + 26v + 84}$$
$$\frac{3v^2}{v + 6}$$

$$22) \frac{x^3 - x^2 - 42x}{2x^2 - 20x + 42}$$
$$\frac{x(x + 6)}{2(x - 3)}$$

$$23) \frac{2v^2 + 10v - 48}{8v + 64}$$
$$\frac{v - 3}{4}$$

$$24) \frac{9x^2 + 81x}{x^3 + 8x^2 - 9x}$$
$$\frac{9}{x - 1}$$

$$25) \frac{x^2 + 2x - 80}{2x^3 - 24x^2 + 64x}$$
$$\frac{x + 10}{2x(x - 4)}$$

$$26) \frac{3r^2 - 39r + 90}{r^2 - 3r - 70}$$
$$\frac{3(r - 3)}{r + 7}$$

Score: ____/5

Name _____

Exit Ticket

Block _____

Simplify:

$$\frac{2ux}{1} \div \frac{2u^2}{x} \cdot \frac{u}{2x^2}$$

Score: ____/5

Name _____

Exit Ticket

Block _____

Simplify:

$$\frac{7x^2}{9y} \div \frac{4x}{15y^2} \cdot \frac{6xy}{35}$$