



Activity 34


Name: \_\_\_\_\_


|                  |                  |                     |                  |                  |                  |
|------------------|------------------|---------------------|------------------|------------------|------------------|
| $\frac{7}{6x}$   | $-\frac{5}{4x}$  | $\frac{7x}{18}$     | $\frac{13x}{12}$ | $\frac{7}{6x}$   | $\frac{x}{7}$    |
| $\frac{13x}{6}$  | $-\frac{13x}{9}$ | $\frac{3x}{8}$      | $-\frac{11}{6x}$ | $\frac{13x}{6}$  | $-\frac{13x}{9}$ |
| $\frac{9x}{10}$  | $\frac{7x}{5}$   | $\frac{8}{x}$       | $\frac{13}{2x}$  | $\frac{9x}{10}$  | $\frac{7x}{5}$   |
| $\frac{9x}{10}$  | $\frac{7x}{5}$   | $\frac{2+3x}{2x^2}$ | $\frac{22}{5x}$  | $\frac{9x}{10}$  | $\frac{7x}{5}$   |
| $-\frac{13x}{9}$ | $\frac{13x}{6}$  | $\frac{7x}{18}$     | $\frac{13x}{12}$ | $-\frac{13x}{9}$ | $-\frac{5}{4x}$  |
| $\frac{x}{7}$    | $\frac{7}{6x}$   | $\frac{3x}{8}$      | $-\frac{11}{6x}$ | $\frac{x}{7}$    | $\frac{7}{6x}$   |


Add or subtract.


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


  $\frac{3x}{5} + \frac{4x}{5}$


  $\frac{x}{4} + \frac{x}{8}$


  $\frac{5x}{7} - \frac{4x}{7}$


  $\frac{x}{2} + \frac{2x}{5}$


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


  $\frac{3}{2x} - \frac{1}{3x}$


  $\frac{5x}{4} - \frac{x}{6}$


  $\frac{3}{4x} - \frac{2}{x}$


  $\frac{1}{x^2} + \frac{3}{2x}$

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

  $\frac{x}{6} + \frac{2x}{9}$

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


  $\frac{2x}{9} - \frac{5x}{3}$


  $\frac{3}{x} + \frac{2}{5x} + \frac{1}{x}$


Name: \_\_\_\_\_

|    |         |            |            |         |            |
|----|---------|------------|------------|---------|------------|
| +8 | $10x-1$ | $x^2+3x+3$ | $2x+7$     | $7x-4$  | $-3x+2$    |
| +6 | $-x-6$  | $5x+2$     | 7          | $3x$    | $2x-1$     |
| +7 | $7x-4$  | $-3x+2$    | $-5x-4$    | $-2x+2$ | $4x+6$     |
|    | $3x$    | $2x-1$     | $x^2+3x+3$ | $-x-6$  | $5x-8$     |
| -4 | $-2x+2$ | $4x+6$     | $6x+8$     | $10x-1$ | $x^2+3x+3$ |
| +3 | $-x-6$  | $5x-8$     | $4x+6$     | $-x-6$  | $5x+2$     |


Add or subtract. Find the numerator on the grid.

  $\frac{3}{x-5} + \frac{4}{x-5}$


  $\frac{x}{x+4} + \frac{2x}{x+4}$

  $\frac{3x-1}{x-1} - \frac{x}{x-1}$


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

  $\frac{4x-5}{x+7} + \frac{x-3}{x+7}$


$\frac{3}{x-1} + \frac{4}{x}$    $\frac{1}{x+3} + \frac{x}{3}$

  $\frac{3}{2x+1} - \frac{4}{x}$

$\frac{4}{2x-1} + \frac{1}{2x}$    $\frac{2}{3x+2} - \frac{3}{4x}$

  $\frac{1}{5(x+2)} + \frac{3}{5x}$

$\frac{4}{x-2} + \frac{2}{x+3}$    $\frac{1}{2x(x-1)} - \frac{3}{2x}$

  $\frac{3}{x^2-4} + \frac{2}{x-2}$

# What Might You Say About a Purple Plaid Shirt With Pink Orange and Green Stripes?



Simplify the expression, then find your answer. Write the letter of the answer in each box with the exercise number. If the answer has a , shade in the box instead of writing a letter in it.

①  $\frac{2}{3n} + \frac{1}{3n} + \frac{7}{3n}$

②  $\frac{8}{5n} + \frac{8}{5n} - \frac{1}{5n}$

③  $\frac{6n}{n+4} + \frac{3n}{n+4}$

④  $\frac{n^2}{n-3} - \frac{9}{n-3}$

⑤  $\frac{n^2}{2n+16} - \frac{64}{2n+16}$

⑥  $\frac{n^2}{5n+30} + \frac{6n}{5n+30}$

⑦  $\frac{n+4}{10} + \frac{3n+8}{10}$

⑧  $\frac{7t+2}{6t} + \frac{2t-11}{6t}$

⑨  $\frac{t}{t^2+2t-15} + \frac{5}{t^2+2t-15}$

⑩  $\frac{t^2}{t^2-11t+18} - \frac{2t}{t^2-11t+18}$

⑪  $\frac{3t}{t^2+7t+10} + \frac{15}{t^2+7t+10}$

⑫  $\frac{5t^2}{t^2-5t-24} - \frac{40t}{t^2-5t-24}$

⑬  $\frac{t^2-8t}{t^2-1} + \frac{7}{t^2-1}$

⑭  $\frac{2t^2+5t}{t^2+8t+16} - \frac{12}{t^2+8t+16}$

## Answers 1-7

K  $\frac{n+8}{4}$      F  $\frac{2(n+3)}{5}$      D  $\frac{3}{n}$

A  $n+3$      N  $\frac{10}{3n}$      J  $\frac{n}{8}$

P  $\frac{3}{n+4}$      U  $\frac{3(n+4)}{10}$      H  $\frac{n-8}{2}$

L  $\frac{n}{5}$      B  $\frac{9n}{n+4}$      V  $\frac{n-3}{3}$

## Answers 8-14

C  $\frac{t}{t-9}$      G  $\frac{2(t-1)}{3t}$      M  $\frac{5t}{t+3}$

D  $\frac{5t^2}{t+8}$      S  $\frac{2t-3}{t+4}$      Y  $\frac{1}{t-3}$

J  $\frac{3t}{t-2}$      T  $\frac{3(t-1)}{2t}$      O  $\frac{t+7}{t-1}$

L  $\frac{t-7}{t+1}$      R  $\frac{2t+1}{t+4}$      I  $\frac{3}{t+2}$

|    |   |    |    |    |   |   |   |    |    |    |   |    |   |    |   |   |   |    |   |    |   |    |   |
|----|---|----|----|----|---|---|---|----|----|----|---|----|---|----|---|---|---|----|---|----|---|----|---|
| 11 | 8 | 14 | 12 | 11 | 1 | 6 | 4 | 12 | 10 | 13 | 4 | 14 | 5 | 12 | 3 | 9 | 6 | 11 | 8 | 14 | 2 | 13 | 7 |
|----|---|----|----|----|---|---|---|----|----|----|---|----|---|----|---|---|---|----|---|----|---|----|---|

# What Did Klorine Say When She Married a Man $3\frac{1}{2}$ Feet Tall?



|   |   |   |   |   |   |   |   |   |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|



Simplify the expression, then find your answer in the adjacent answer column. Write the word next to the correct answer in the box that contains the exercise number.

$$\frac{29a}{10} \text{ MARRY}$$

$$3a \text{ TO}$$

$$\frac{4a+7}{3a} \text{ HEART}$$

$$\frac{89a+2}{30a} \text{ SHORT}$$

$$\frac{37a}{10} \text{ HAVE}$$

$$\frac{9a+20}{24} \text{ GONE}$$

$$\frac{13a}{21} \text{ BETTER}$$

$$\frac{22a-1}{16a} \text{ A}$$

$$\frac{77a+4}{30a} \text{ GOOD}$$

$$\frac{4a+5}{a} \text{ MAN}$$

$$\frac{24a-3}{16a} \text{ ONCE}$$

$$\frac{11a+19}{24} \text{ LOVED}$$

$$1. \frac{4a}{7} + \frac{a}{21}$$

$$2. \frac{3a}{4} + \frac{8a}{3} - \frac{5a}{12}$$

$$3. \frac{9a}{2} - \frac{4a}{5}$$

$$4. \frac{a+2}{3} + \frac{a+1}{8}$$

$$5. \frac{5a-1}{4a} + \frac{2a+3}{16a}$$

$$6. \frac{3a+4}{10a} + \frac{8a-1}{3a}$$

$$7. \frac{a+8}{3a} + \frac{5a+4}{2a} + \frac{7a+2}{6a}$$

$$8. \frac{7}{x} + \frac{2}{x^2}$$

$$9. \frac{3}{8x} - \frac{11}{4x^2}$$

$$10. \frac{1}{3x} + \frac{12}{5x^3}$$

$$11. \frac{15}{4x} + \frac{2}{5x^2} - \frac{9}{20x^3}$$

$$12. \frac{x+1}{3x} + \frac{2x+7}{4x^2}$$

$$13. \frac{2x-3}{9x^2} + \frac{5x+2}{2x}$$

$$14. \frac{2x+5}{6x^2} + \frac{4}{5x} + \frac{3-8x}{10x^3}$$

$$\frac{5x^2 + 36}{15x^3} \text{ TO}$$

$$\frac{40x^2 + 15x - 8}{18x^2} \text{ BIG}$$

$$\frac{34x^2 + x + 9}{30x^3} \text{ TALL}$$

$$\frac{75x^2 + 8x - 9}{20x^3} \text{ HAVE}$$

$$\frac{2x^2 + 7x + 14}{12x^2} \text{ KNOW}$$

$$\frac{3x - 22}{8x^2} \text{ NEVER}$$

$$\frac{45x^2 + 22x - 6}{18x^2} \text{ A}$$

$$\frac{28x^2 + 3x + 8}{30x^3} \text{ STAR}$$

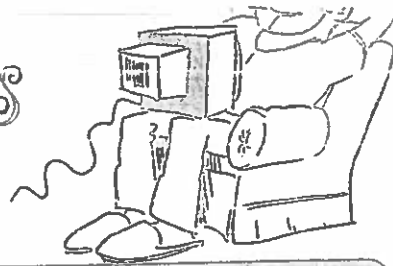
$$\frac{4x^2 + 10x + 21}{12x^2} \text{ LOVED}$$

$$\frac{30x^2 + 4x - 15}{20x^3} \text{ LOSE}$$

$$\frac{7x+2}{x^2} \text{ THAN}$$

$$\frac{6x-11}{8x^2} \text{ BE}$$

# What Kind of TV Show Is Most Relaxing to Watch?



Simplify the expression. Find your solution in the boxes below and cross out the letter under it. When you finish, the answer to the title question will remain.

$$① \frac{9}{x-1} + \frac{4}{x^2-1}$$

$$② \frac{d}{d+3} + \frac{5d+6}{d^2+3d}$$

$$③ \frac{15-8x}{x^2-5x} + \frac{x}{x-5}$$

$$④ \frac{7}{d+4} + \frac{2}{d^2+7d+12}$$

$$⑤ \frac{8}{x^2+3x-10} + \frac{3}{x-2}$$

$$⑥ \frac{4d}{d^2+10d+21} + \frac{d}{d+7}$$

$$⑦ \frac{5}{x+9} + \frac{3}{x-4}$$

$$⑧ \frac{4}{d^2-25} + \frac{3}{d-5} + \frac{8}{d+5}$$

$$⑨ \frac{2}{x-3} + \frac{11}{x^2+5x-24} + \frac{1}{x+8}$$

$$⑩ \frac{25}{d^2-9d+14} + \frac{d}{d-7} + \frac{5}{d-2}$$

## Answers - Odd-Numbered Exercises

|                            |                            |                            |                            |                           |                           |                 |                            |                 |
|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|-----------------|----------------------------|-----------------|
| $\frac{3x+23}{(x+5)(x-2)}$ | $\frac{3x-10}{(x+5)(x-2)}$ | $\frac{4x-15}{(x+5)(x-3)}$ | $\frac{9x+13}{(x+1)(x-1)}$ | $\frac{8x+7}{(x+9)(x-4)}$ | $\frac{9x-4}{(x+1)(x-1)}$ | $\frac{3}{x-3}$ | $\frac{6x+25}{(x+9)(x-4)}$ | $\frac{x-3}{x}$ |
| W                          | A                          | S                          | C                          | P                         | I                         | N               | T                          | O               |

## Answers - Even-Numbered Exercises

|                            |                   |                                |                           |                             |                            |                 |                            |                 |
|----------------------------|-------------------|--------------------------------|---------------------------|-----------------------------|----------------------------|-----------------|----------------------------|-----------------|
| $\frac{7d+23}{(d+4)(d+3)}$ | $\frac{d+5}{d-7}$ | $\frac{d^2+5d-30}{(d-2)(d-7)}$ | $\frac{d^2-3d+8}{d(d+3)}$ | $\frac{11d-21}{(d+5)(d-5)}$ | $\frac{7d-20}{(d+4)(d+3)}$ | $\frac{d+2}{d}$ | $\frac{15d-8}{(d+5)(d-5)}$ | $\frac{d}{d+3}$ |
| D                          | S                 | C                              | A                         | N                           | L                          | A               | M                          | E               |