## 4.6 Notes

# WHY ISN'T A SNOWMAN VERY SMART?

Express each difference below in simplest form. Find your answer and notice the letter next to it. Write this letter in each box containing the number of that exercise.

1 
$$\frac{8}{x^2-4} - \frac{3}{x-2}$$

$$\frac{6}{6}$$
  $\frac{3}{d-7} - \frac{2}{3d+1}$ 

2 
$$\frac{9}{x^2-2x-15}-\frac{2}{x+3}$$

$$\sqrt[8]{7} \frac{8}{5d+4} - \frac{1}{2d-3}$$

3 
$$\frac{7x}{x^2-9x+14}-\frac{4}{x-7}$$

$$\frac{8}{8} \frac{d+2}{4d-1} - \frac{7}{d+5}$$

$$4 \frac{3}{x-4} - \frac{x-9}{x^2-16}$$

$$9 \frac{d^2 + 3}{d^2 - 2d} - \frac{d - 4}{d}$$

$$\frac{6}{6}$$
 10  $\frac{d^2-11}{d^2-7d+12}-\frac{d+1}{d-4}$ 

### Answers:

$$\bigcirc$$
  $\frac{-2x+19}{(x+3)(x-5)}$ 

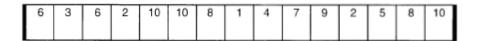
$$\frac{8\mathbf{d} - 15}{(5\mathbf{d} + 4)(2\mathbf{d} - 15)}$$

① 
$$\frac{3}{x+4}$$
 ②  $\frac{2x+3}{(x-2)(x-7)}$  § § §  $\frac{2}{d-3}$  (H)  $\frac{7d+17}{(d-7)(3d+1)}$ 

$$\bigcirc \frac{-3x+2}{(x+2)(x-2)} \bigcirc \frac{2x+21}{(x+4)(x-4)}$$

$$\bigcirc \frac{-3x+2}{(x+2)(x-2)} \bigcirc \frac{2x+21}{(x+4)(x-4)} \stackrel{?}{\searrow} \bigcirc \frac{d^2-21d+17}{(4d-1)(d+5)} \bigcirc \frac{d^2-18d+4}{(4d-1)(d+5)}$$

$$\frac{6\mathbf{d} - 5}{(\mathbf{d} - 2)}$$



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# WHY ISN'T A SNOWMAN VERY SMART?

Express each difference below in simplest form. Find your answer and notice the letter next to it. Write this letter in each box containing the number of that exercise.

1 
$$\frac{8}{x^2-4} - \frac{3}{x-2}$$

$$60 \frac{3}{d-7} - \frac{2}{3d+1}$$

2 
$$\frac{9}{x^2-2x-15}-\frac{2}{x+3}$$

$$7\frac{8}{5d+4} - \frac{1}{2d-3}$$

$$3 \frac{7x}{x^2 - 9x + 14} - \frac{4}{x - 7}$$

$$\frac{6}{8}$$
  $\frac{d+2}{4d-1} - \frac{7}{d+5}$ 

$$\frac{3}{x-4} - \frac{x-9}{x^2-16}$$

$$9 \frac{d^2+3}{d^2-2d} - \frac{d-4}{d}$$

$$\oint \int \int \frac{d^2 - 11}{d^2 - 7d + 12} - \frac{d + 1}{d - 4}$$

#### Answers:

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

$$\bigcirc$$
  $\frac{3d+8}{d(d-2)}$ 

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

$$\bigcirc$$
  $\frac{2}{d-3}$ 

$$\bigcirc \frac{-3x+2}{(x+2)(x-2)} \bigcirc \frac{2x+21}{(x+4)(x-4)} \stackrel{6}{\searrow} \bigcirc \frac{d^2-21d+17}{(4d-1)(d+5)} \bigcirc \frac{d^2-18d+4}{(4d-1)(d+5)}$$

$$6d - 5$$

$$(4d - 1)(d + 5)$$

