|  |  |
| --- | --- |
| **Match-Up** | **Simplifying Algebraic Fractions** |

Simplify each of the algebraic fractions then find matching threes of equivalent fractions

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | $$\frac{x(x+1)}{(x+1)(x+2)}$$ |  | **A** | $$\frac{x^{2}+6x+8}{(x+4)(x-1)}$$ |  | **a** | $$\frac{10x^{2}+2x}{(5x+1)(x-7)}$$ |
| **2** | $$\frac{2x^{2}+4x}{10x}$$ |  | **B** | $$\frac{3x^{2}-x-2}{(x-5)(x-1)}$$ |  | **b** | $$\frac{2x^{2}+5x+2}{10x+5}$$ |
| **3** | $$\frac{(x-1)(x+9)}{(x+9)(x+4)}$$ |  | **C** | $$\frac{2x^{2}-9x+4}{(x-4)^{2}}$$ |  | **c** | $$\frac{x^{3}+11x^{2}+18x}{x^{3}+x^{2}-2x}$$ |
| **4** | $$\frac{x^{2}+2x}{x^{2}-x}$$ |  | **D** | $$\frac{x^{2}}{x^{2}+2x}$$ |  | **d** | $$\frac{x^{2}-4x-21}{2x^{2}-13x-7}$$ |
| **5** | $$\frac{3x+9}{6x+3}$$ |  | **E** | $$\frac{(x+2)(2x-1)}{5x^{2}+11x+2}$$ |  | **e** | $$\frac{x^{2}-3x}{x^{2}-x-6}$$ |
| **6** | $$\frac{5x(3x+2)}{5x^{2}-25x}$$ |  | **F** | $$\frac{2x(2x+1)}{(2x+1)(x-7)}$$ |  | **f** | $$\frac{4x^{2}-1}{10x^{2}+7x+1}$$ |
| **7** | $$\frac{4x^{3}}{2x^{3}-14x^{2}}$$ |  | **G** | $$\frac{x^{2}-1}{(x+1)(x+4)}$$ |  | **g** | $$\frac{3x^{2}+17x+10}{x^{2}-25}$$ |
| **8** | $$\frac{2x^{2}-x}{5x^{2}+x}$$ |  | **H** | $$\frac{x^{2}+8x-9}{x^{2}-2x+1}$$ |  | **h** | $$\frac{x^{2}-3x-10}{x^{2}-6x+5}$$ |
| **9** | $$\frac{2-4x}{8-2x}$$ |  | **I** | $$\frac{2x(x+3)}{4x^{2}+2x}$$ |  | **i** | $$\frac{10x^{2}+x-3}{5x^{2}-17x-12}$$ |
| **10** | $$\frac{(3x+1)(x+9)}{(x-1)(3x+1)}$$ |  | **J** | $$\frac{(x-3)(x+2)}{5x-15}$$ |  | **j** | $$\frac{x^{2}+2x-3}{x^{2}+7x+12}$$ |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |