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Math worksheet on *'Algebraic Functions - Variable Substitution to Equation - Multiple Fractional Terms (Negatives) (Level 2)'*. Part of a broader unit on *'Algebra Basic Concepts - Advanced'*

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1 What does this equation become when y=8, b=4, x=-2, p=2

$$\frac{3y}{2b} + \frac{6x}{2p}$$

a $\frac{3 \cdot 8}{2 \cdot 4 - 6 \cdot -2}$

b $\frac{3 \cdot 8}{2 \cdot 4} \times \frac{6 \cdot -2}{2 \cdot 2}$

c $\frac{3 \cdot 8}{2 \cdot 4} + \frac{6 \cdot -2}{2 \cdot 2}$

d $\frac{3 \cdot 8}{2 \cdot 4} - \frac{6 \cdot -2}{2 \cdot 2}$

e $\frac{3+8}{2+4} + \frac{6+-2}{2+2}$

f $\frac{3 \cdot 8 + 6 \cdot -2}{2 \cdot 4}$

2 What does this equation become when x=6, b=-2, d=-7, c=-3

$$\frac{-4x}{2b} - \frac{6d}{7c}$$

a $\frac{-4+6}{2+-2} - \frac{6+-7}{7+-3}$

b $\frac{4 \cdot 6}{2 \cdot -2} + \frac{6 \cdot -7}{7 \cdot -3}$

c $\frac{-4 \cdot 6}{2 \cdot -2} - \frac{6 \cdot -7}{7 \cdot -3}$

d $\frac{-4 \cdot 6}{2 \cdot -2} \times \frac{6 \cdot -7}{7 \cdot -3}$

e $\frac{-4 \cdot 6}{2 \cdot -2} + \frac{6 \cdot -7}{7 \cdot -3}$

f $\frac{4 \cdot 6}{2 \cdot -2} - \frac{6 \cdot -7}{7 \cdot -3}$

3 What does this equation become when p=8, m=-4, b=-8, d=2

$$\frac{-4p}{2m} - \frac{7b}{7d}$$

a $\frac{-4 \cdot 8}{2 \cdot -4} \times \frac{7 \cdot -8}{7 \cdot 2}$

b $\frac{-4 \cdot 8}{2 \cdot -4} + \frac{7 \cdot -8}{7 \cdot 2}$

c $\frac{-4+8}{2+-4} - \frac{7+-8}{7+2}$

d $\frac{4 \cdot 8}{2 \cdot -4} - \frac{7 \cdot -8}{7 \cdot 2}$

e $\frac{-4 \cdot 8}{2 \cdot -4} - \frac{7 \cdot -8}{7 \cdot 2}$

f $\frac{4 \cdot 8}{2 \cdot -4} + \frac{7 \cdot -8}{7 \cdot 2}$

4 What does this equation become when p=2, r=-3, x=-6, m=3

$$\frac{-3p}{2r} - \frac{7x}{2m}$$

a $\frac{-3 \cdot 2}{2 \cdot -3} - \frac{7 \cdot -6}{2 \cdot 3}$

b $\frac{-3 \cdot 2}{2 \cdot -3} \times \frac{7 \cdot -6}{2 \cdot 3}$

c $\frac{3 \cdot 2}{2 \cdot -3} - \frac{7 \cdot -6}{2 \cdot 3}$

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

e $\frac{3 \cdot 2}{2 \cdot -3} + \frac{7 \cdot -6}{2 \cdot 3}$

f $\frac{-3+2}{2+-3} - \frac{7+-6}{2+3}$

5 What does this equation become when m=-6, n=-7, b=-4, p=8

$$\frac{-7m}{2n} - \frac{6b}{3p}$$

a $\frac{-7 \cdot -6}{2 \cdot -7} + \frac{6 \cdot -4}{3 \cdot 8}$

b $\frac{-7 \cdot -6}{2 \cdot -7} \times \frac{6 \cdot -4}{3 \cdot 8}$

c $\frac{7 \cdot -6}{2 \cdot -7} + \frac{6 \cdot -4}{3 \cdot 8}$

d $\frac{-7 \cdot -6}{2 \cdot -7} - \frac{6 \cdot -4}{3 \cdot 8}$

e $\frac{7 \cdot -6}{2 \cdot -7} - \frac{6 \cdot -4}{3 \cdot 8}$

f $\frac{-7+-6}{2+-7} - \frac{6+-4}{3+8}$

6 What does this equation become when p=5, d=-3, m=7, y=2

$$\frac{6p}{2d} + \frac{4m}{2y}$$

a $\frac{6 \cdot 5}{2 \cdot -3} \times \frac{4 \cdot 7}{2 \cdot 2}$

b $\frac{6 \cdot 5 + 4 \cdot 7}{2 \cdot -3}$

c $\frac{6 \cdot 5}{2 \cdot -3 - 4 \cdot 7}$

d $\frac{6 \cdot 5}{2 \cdot -3} + \frac{4 \cdot 7}{2 \cdot 2}$

e $\frac{6+5}{2+-3} + \frac{4+7}{2+2}$

f $\frac{6 \cdot 5}{2 \cdot -3} - \frac{4 \cdot 7}{2 \cdot 2}$

7 What does this equation become when z=8, r=4, d=-6, c=6

$$\frac{2z}{4r} + \frac{2d}{2c}$$

a $\frac{2 \cdot 8}{4 \cdot 4 - 2 \cdot -6}$

b $\frac{2+8}{4+4} + \frac{2+-6}{2+6}$

c $\frac{2 \cdot 8 + 2 \cdot -6}{4 \cdot 4}$

d $\frac{2 \cdot 8}{4 \cdot 4} - \frac{2 \cdot -6}{2 \cdot 6}$

e $\frac{2 \cdot 8}{4 \cdot 4} \times \frac{2 \cdot -6}{2 \cdot 6}$

f $\frac{2 \cdot 8}{4 \cdot 4} + \frac{2 \cdot -6}{2 \cdot 6}$