DOM 33 12.15.14

I. Solve the following:

\[ \frac{3}{5}(10x + 5) + 6 = 12 \]

II. Which is the equation of a linear function?

A. \( y = -2x^2 + 2x - 8 \)  
B. \( y = 4x^3 \)  
C. \( y = -2x + 2 \)  
D. \( y = 6/x \)

Notes 8A: Converting Equations in Standard Form to Slope-Intercept Form 12.15.14

The slope-intercept form of a linear equation is

\[ y = mx + b \]

There is also a Standard Form of a linear equation which is \( Ax + By = C \); where a, b, and c are integers and a and b are not both zero.

*When an equation is in Standard Form \( Ax + By = C \) we can write the equation in \( y = mx + b \) form by solving the equation for \( y \) using inverse operations.

Ex. a) Write \( 3x - 4y = 8 \) in slope-intercept form.

Key: \( y = mx + b \); \( Ax + By = C \); \( y \); Ex a) \( y = \frac{-3}{4}x - 2 \)

8B: Converting Equations into Slope-Intercept Form 12.15.14

1) \( 2x + y = 4 \)

EXTRA PRACTICE:

7) \( 3y + 5x = 15 \)

8) \( -2y = 12 - 3x \)

9) \( -x + 4y = 8 \)

10) \( 2y - 3x = 6 \)

11) \( -2x + 5y = 5 \)

Key: \( y = 2x + 4 \); \( 2y = 4/2 \); \( 3y = 3/2 \); \( y = ax + b \)

2) \( -\frac{1}{3}x + \frac{3}{4}y = \frac{9}{3} - \frac{1}{3}x \)

\[ y = 3 - 1x \rightarrow y = 3 + -6x \]

\[ y = \frac{-7}{6} \]

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