

# 4.6 Enrichment and Extension

## Matching Equations and Graphs

Copy the equations and graphs onto index cards. Mix the cards up and lay them face down. With a friend, take turns turning over pairs of cards. If you find a matching graph and equation, remove the pair and take another turn. If the pair doesn't match, turn both cards face down again. Continue until all pairs are removed. The player with the most pairs wins.

\* Match each graph with the correct equation.

A  $y = \frac{1}{3}x + 2$

B  $y = 2x - 2$

C  $y = -x + 3$

D  $y = 4x$

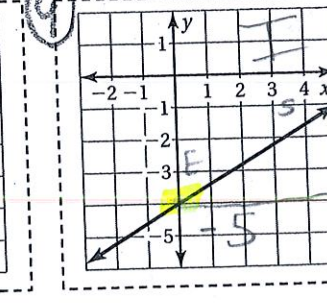
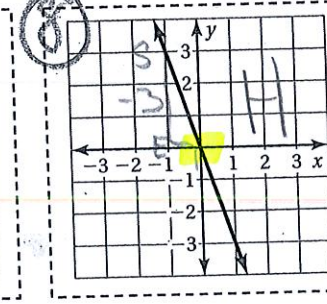
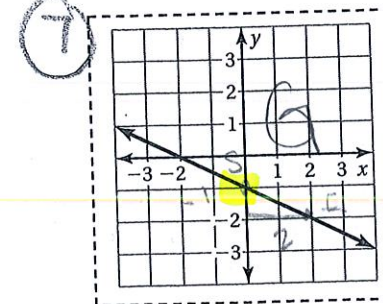
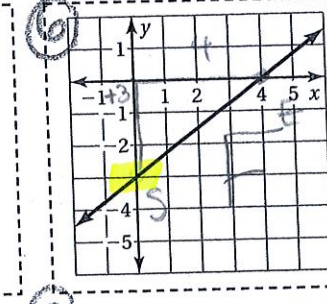
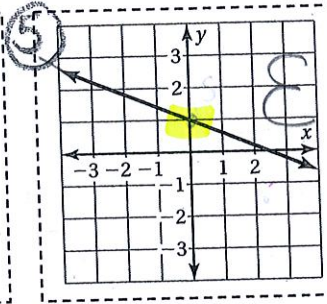
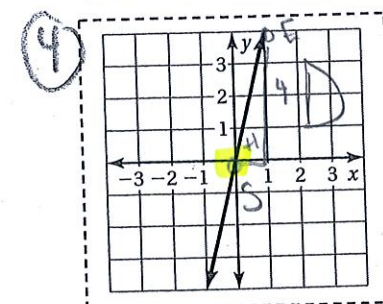
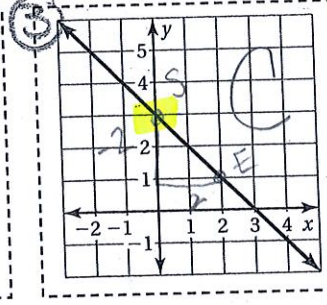
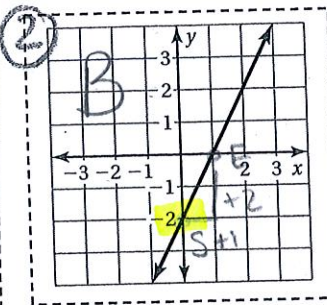
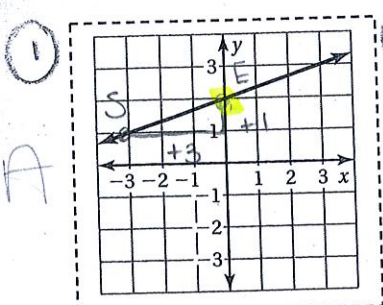
E  $y = -\frac{2}{5}x + 1$

F  $y = \frac{3}{4}x - 3$

G  $y = -\frac{1}{2}x - 1$

H  $y = -3x$

I  $y = \frac{3}{5}x - 4$



1) A  
Slope:  $\frac{1}{3}$

y-int: 2  
 $y = \frac{1}{3}x + 2$

2) B  
Slope:  $\frac{2}{1}$

y-int: -2  
 $y = 2x - 2$

3) C  
Slope:  $-\frac{2}{2} = -1$   
y-int: 3  
 $y = -x + 3$

4) D  
Slope:  $\frac{4}{1}$   
y-int: 0  
 $y = 4x$

5) E  
Slope:  $-\frac{2}{5}$   
y-int: +1  
 $y = -\frac{2}{5}x + 1$

6) F  
Slope:  $\frac{3}{4}$   
y-int: -3  
 $y = \frac{3}{4}x - 3$

7) G  
Slope:  $-\frac{1}{2}$   
y-int: -1  
 $y = -\frac{1}{2}x - 1$

8) H  
 $y = -3x$   
Slope:  $-3/1$   
y-int: 0

9) I  
Slope:  $\frac{3}{5}$   
y-int: -4  
 $y = \frac{3}{5}x - 4$