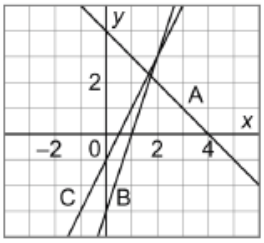
Lesson 4.4: Matching Equations and Graphs

1. Match each equation with a graph on this grid.

a) $y = 2x - 1$ C
b) $y = -x + 4$ A
c) $y = 3x - 3$ B
intercept



2. Match each equation with a graph on this grid.

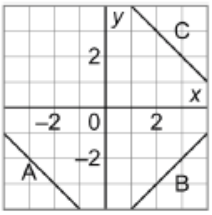
a) $y = -1$ C
b) $0 = -x + 1$
$0 + x = -x + x + 1$
$x = 1$ A
c) $2 = 2x - 3$
$+3 \quad +3$
$2x - 3 = 2$
$\frac{2x}{2} = \frac{5}{2}$ $x = \frac{5}{2}$ B

3. Match each equation with a graph on this grid. Justify your answers.

a) $x + y = 5$
b) $x - y = 5$
c) $x + y = -5$

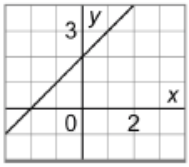
$-x \quad -x$
$y = -x + 5$ C
$-y = -x + 5$
$\frac{-y}{-1} = \frac{-x}{-1} + \frac{5}{-1}$
$y = x - 5$ B

$y = -x - 5$ A



4. Which equation describes this graph? Justify your answers.

a) $y = x + 2$
b) $y = -x + 2$
c) $y = x - 2$



5. Which equation describes this graph? Justify your answers.

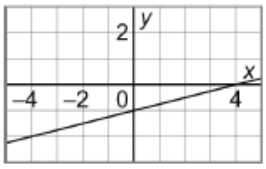
a) $x - y = 4$ $-y = -x + 4$
b) $x - 4y = 4$ $y = x - 4$
c) $4x - y = 1$

$\frac{-4y}{-4} = \frac{-x}{-4} + \frac{4}{-4}$

$y = \frac{x}{4} - 1$

c) $\frac{-y}{-1} = \frac{-4x}{-1} + \frac{1}{-1}$

$y = 4x - 1$



(4,0)

b) $4 - 4(0)$ | RS
$= 4$ | 4
✓

c) $4(4) - 0$ | 1
$16 - 0$
16
NO so not the answer

Lesson 4.5: Using Graphs to Estimate Values

1. This graph represents a linear relation.

a) Determine the value of x for each value of y.

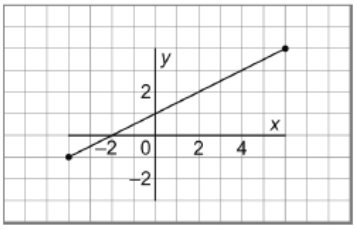
i) $y = 1$ **ii)** $y = 3$

iii) $y = 0$

b) Determine the value of y for each value of x.

i) $x = 2$ **ii)** $x = 8$

iii) $x = -6$



2. This graph represents a linear relation.

a) Determine the value of x for each value of y.

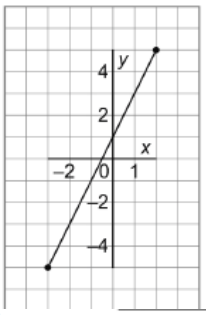
i) $y = 3$ **ii)** $y = -2$

iii) $y = 7$

b) Determine the value of y for each value of x.

i) $x = 0$ **ii)** $x = -2$

iii) $x = -4$



3. This graph represents a linear relation.

a) Determine the value of x for each value of y.

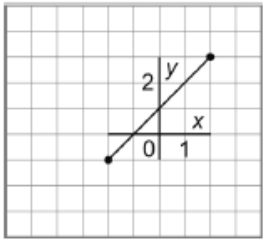
i) $y = 2$ **ii)** $y = 0$

iii) $y = 5$

b) Determine the value of y for each value of x.

i) $x = 0$ **ii)** $x = 3$

iii) $x = -5$



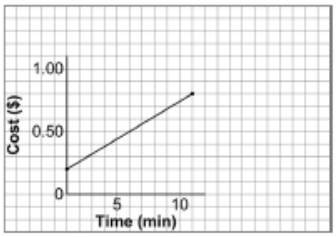
4. The graph shows how the cost of a long distance call changes with the time for the call.

a) Estimate the cost of a 7-min call.
Is this interpolation or extrapolation? Explain.

b) The cost of a call was \$1.00.
Estimate the time for the call.

c) The cost of a call was \$1.50.
Estimate the time for the call.

Cost of Long Distance Calls



TEST PREPARATION

MMS9

PAGE 200: "Study Guide"

PAGES 201 / 202 / 203: "Review"

- **they are ALL good practice questions**

PAGE 204: "Practice Test"

- **again, ALL good practice questions**