

**High School Math © 2007**

TOSRA  
2/3  
12/13

**Test 3**

**Presentation Book**

**Textbook**

**Workbook**

**Answer Key** *with Remedies*

**Mastery Test 3—  
Follows Lesson 35**

**EXERCISE 1 TEST 3  
Workbook and Textbook**

TPB  
comes before 236

*Note: Students are not to use a calculator for any part of the test.*

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- a. Open your workbook to test 3 at the end of your workbook. Find part 1. ✓
  - b. This is a test. You should have only your workbook, textbook, a sharpened pencil, and lined paper.
  - c. Work parts 1 through 9. Raise your hand when you've completed part 9.
- (Observe students but do **not** give feedback.)

**Marking the Test**

- a. (Collect the papers. Use the Answer Key to score the tests. Award scores as follows:)

TEST 3 PERCENT SUMMARY					
SCORE	%	SCORE	%	SCORE	%
44	100	<del>40</del>	<del>98</del>	35	80
43	98	39	89	34	77
42	95	38	86	33	75
41	93	37	84	32	73
40	91	36	82	31	70

Papers

See Test 1  
Comments

TPB

- b. (Complete the Test 3 Remedy Summary to determine whether remedies are needed. Reproducible Summary Sheets are at the back of the Teacher's Guide.)
  - (If more than 1/4 of the students did not pass a test part, present the remedy for that part before beginning lesson 35. Remedies appear at the end of the Test 3 Answer Key.)

**Mastery Test 3—Follows Lesson 35**  
**Workbook**

**Part 1**

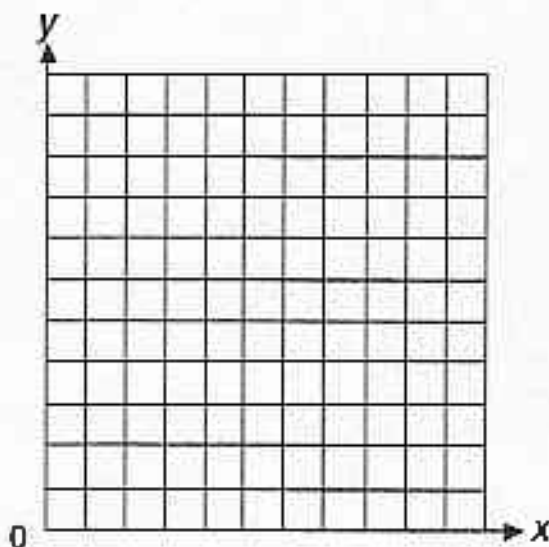
**Make a point on the coordinate system for each description.  
Label each point.**

Point A:  $x = 6, y = 4$

Point B:  $x = 9, y = 3$

Point C:  $x = 5, y = 0$

Point D:  $x = 0, y = 7$



**Part 2**

**Simplify each problem. Then work it.**

a.  $\frac{5}{6} \left( \frac{12}{3} \right) =$

c.  $\frac{4x}{9} \left( \frac{3}{68} \right) =$

e.  $\frac{25}{35} - \frac{1}{7} =$

b.  $\frac{3}{4} \pm \frac{28}{16} =$

d.  $\frac{5}{6} + \frac{24}{12} =$

f.  $10y \left( \frac{8}{40y} \right) =$

**Part 3**

**Figure out what each letter equals.**

a.  $2p = 14 - 8$

c.  $4 + 3m = 25$

e.  $17 + 11 = 7r$

b.  $2 = 4d - 10$

d.  $\frac{1}{3}n - 4 = 1$

f.  $9 = \frac{2}{3}p + 3$

**Mastery Test 3—Follows Lesson 35**  
**Textbook**

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**Part 4**

Copy and simplify each fraction.

a.  $\frac{90}{30}$

b.  $\frac{81}{117}$

c.  $\frac{200}{250}$

d.  $\frac{136}{56}$

e.  $\frac{32}{20}$

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**Part 5**

Solve each problem. Start with a letter equation. Write your answer as a number with a unit name.

- a. There were 76 cars in the parking lot. 13 were blue. How many were not blue?
- b. In the garden, there were 8 roses and 21 lilacs. How many flowers were there in the garden?
- c. 312 students were at the prom. 160 were girls. How many boys were there?
- d. Inside the factory, there were 18 boxes. The rest of the boxes were outside. There were 59 boxes in all. How many boxes were outside?
- 

**Part 6**

Solve each problem.

a.  $\frac{1}{4}g = \frac{3}{5}$

b.  $\frac{15}{7} = \frac{8}{7} + r$

c.  $6 = \frac{11p}{8}$

d.  $12 = m - 8$

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**Part 7**

Write an equation with letters for each sentence.

- a.  $x$  is  $\frac{3}{8}$  of  $y$ .
- b. Rudy can throw 20 yards farther than Joc.
- c. Jimmy was  $\frac{4}{5}$  the height of Andy.
- d. The car is 8 feet longer than the bike.
- e. A plane travels  $\frac{17}{4}$  the speed of the car.
- f. The house is 80 feet shorter than the building.
- g. The CD costs  $\frac{3}{7}$  as much as the watch.

### Mastery Test 3 cont.

#### Part 8

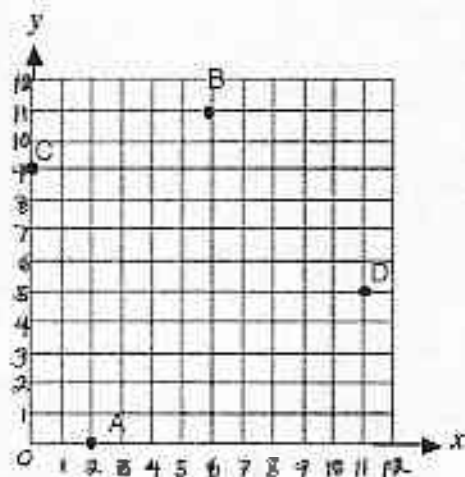
For each point, write an equation for  $x$  and an equation for  $y$ .

A  $x = \blacksquare$   $y = \blacksquare$

B  $x = \blacksquare$   $y = \blacksquare$

C  $x = \blacksquare$   $y = \blacksquare$

D  $x = \blacksquare$   $y = \blacksquare$



#### Part 9

For each problem, write the rate equation with letters. Then write the rate equation with the numbers that the problem gives.

- How many stacks are made by 110 books if there are 10 books in each stack?
- If it takes 2 weeks to make 3 computers, how long does it take to make 12 computers?
- There are a total of 35 T-shirts in 5 identical packages. How many T-shirts are in 3 of those packages?
- 4 bags weigh 7 pounds. How much do 10 bags weigh?

**((Answer Key Book))  
Mastery Test 3—Follows Lesson 35**

TEST 1 PERCENT SUMMARY					
SCORE	%	SCORE	%	SCORE	%
44	100	<del>40</del>	<del>91</del>	35	80
43	98	39	89	34	77
42	95	38	86	33	75
41	93	37	84	32	73
40	91	36	82	31	70

*Reflow*

TEST 3 SCORING CHART			
Part	Score	Possible Score	Passing Score
1	1 for each labeled point	4	3
2	1 for each item	6	5
3	1 for each item	6	5
4	1 for each item	5	4
5	1 for each item	4	4
6	1 for each item	4	4
7	1 for each item	7	6
8	1 for each item	4	3
9	1 for each item	4	3
<b>TOTAL</b>		<b>44</b>	

## Mastery Test 3—Follows Lesson 35 Workbook

### Part 1

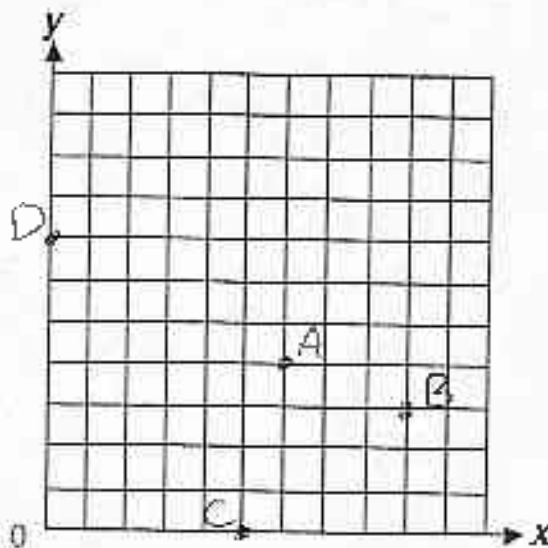
Make a point on the coordinate system for each description.  
Label each point.

Point A:  $x = 6, y = 4$

Point B:  $x = 9, y = 3$

Point C:  $x = 5, y = 0$

Point D:  $x = 0, y = 7$



### Part 2

Simplify each problem. Then work it.

a.  $\frac{5}{3} \cdot \frac{2}{8} \left( \frac{12}{8} \right) = \frac{10}{3}$

c.  $\frac{1}{3} \cdot \frac{4}{8} \left( \frac{8}{17} \right) = \frac{1}{51}$

e.  $\frac{5}{7} \cdot \frac{28}{35} - \frac{1}{7} = \frac{4}{7}$

b.  $\frac{3}{4} + \frac{7}{4} \cdot \frac{28}{18} = \frac{10}{4}$

d.  $\frac{5}{6} + \frac{12}{6} \cdot \frac{24}{18} = \frac{17}{6}$

f.  $\frac{2}{10} \cdot \frac{8}{10} \left( \frac{8}{10} \right) = 2$

[Accept  $\frac{5}{2}$ ]

[Accept  $2\frac{5}{6}$ ]

### Part 3

Figure out what each letter equals.

a.  $2p = 14 - 8$   
 $\left(\frac{1}{2}\right) 2p = 6 \left(\frac{1}{2}\right)$   
 $p = 3$

c.  $4 + 3m = 25$   
 $-4 \quad -4$   
 $\left(\frac{1}{3}\right) 3m = 21 \left(\frac{1}{3}\right)$   
 $m = 7$

e.  $17 + 11 = 7r$   
 $\left(\frac{1}{7}\right) 28 = 7r \left(\frac{1}{7}\right)$   
 $4 = r$

b.  $2 = 4d - 10$   
 $+10 \quad +10$   
 $\left(\frac{1}{4}\right) 12 = 4d \left(\frac{1}{4}\right)$   
 $3 = d$

d.  $\frac{1}{3}m - 4 = 1$   
 $\quad \quad +4 \quad +4$   
 $(3) \frac{1}{3}m = 5(3)$   
 $m = 15$

f.  $9 = 2p + 3$   
 $-3 \quad -3$   
 $\left(\frac{2}{2}\right) 6 = \frac{2}{2}p \left(\frac{3}{2}\right)$   
 $9 = p$

(Follows WB Part 1 on T-1 end of WB) T-2

## ANSWER KEY

## Mastery Test 3

## Textbook

[Part 4]

$$a. \frac{3 \cancel{9}0}{\cancel{3}0} = \boxed{3}$$

$$c. \frac{4 \cancel{2}00}{\cancel{5}0} = \boxed{\frac{4}{5}}$$

$$e. \frac{8 \cancel{4}0}{\cancel{5}0} = \boxed{\frac{8}{5}}$$

$$b. \frac{9 \cancel{8}1}{\cancel{4}7} = \boxed{\frac{9}{13}}$$

$$d. \frac{17 \cancel{3}4 \cancel{6}8}{\cancel{5}0} = \boxed{\frac{17}{7}}$$

[Part 5]

~~$$a. \frac{76}{13} = 5 \text{ R } 11$$~~

$$a. c = b + nb$$

$$76 = 13 + nb$$

$$\begin{array}{r} 76 \\ -13 \\ \hline 63 \end{array}$$

63 cars (not blue)

63 not blue cars

~~$$c. \frac{312}{160} = 1 \text{ R } 152$$~~

$$152 \text{ boys}$$

$$e. s = a + b$$

$$312 = 160 + b$$

$$\begin{array}{r} 312 \\ -160 \\ \hline 152 \end{array}$$

$$152 = b$$

152 boys

~~$$b. \frac{29}{13} = 2 \text{ R } 3$$~~

$$b. f = r + l$$

$$f = 8 + 21$$

$$f = 29$$

29 flowers

29 flowers

~~$$d. \frac{59}{18} = 3 \text{ R } 5$$~~

$$d. b = i + o$$

$$59 = 18 + o$$

$$\begin{array}{r} 59 \\ -18 \\ \hline 41 \end{array}$$

41 boxes [outside]

[Part 6]

$$a. (4) \frac{1}{4} g = \frac{3}{5} (4)$$

$$\boxed{g = \frac{12}{5}}$$

~~$$c. (8) \frac{1}{8} p = \frac{11}{8} (8)$$

$$(1) 48 = 11p$$

$$\frac{48}{11} = p$$~~

$$e. \left(\frac{8}{11}\right) 6 = \frac{11}{8} p \left(\frac{8}{11}\right)$$

$$\boxed{\frac{48}{11} = p}$$

$$b. \frac{15}{7} = \frac{8}{7} + r$$

$$\begin{array}{r} 15 \\ -8 \\ \hline 7 \end{array}$$

$$\frac{7}{7} = r$$

1 = r

$$d. 12 = m - 8$$

$$\begin{array}{r} 12 \\ +8 \\ \hline 20 \end{array}$$

20 = m

## ANSWER KEY

## Mastery Test 3

## [Part 7]

a.  $x = \frac{3}{8}y$

b.  $R = J + 20$

c.  $J = \frac{4}{5}A$

d.  $c = b + 8$

## [Part 8]

A  $x = \boxed{2}, y = \boxed{0}$

B  $x = \boxed{6}, y = \boxed{11}$

## [Part 9]

a.  $b\left(\frac{5}{b}\right) = 5$

$110\left(\frac{1}{10}\right) = 5$

~~11 weeks~~

b.  $c\left(\frac{w}{c}\right) = w$

$12\left(\frac{2}{3}\right) = w$

~~8 weeks~~  
 $8 \text{ weeks}$

## Textbook

e.  $p = \frac{17}{4}c$

f.  $h = b - 80$

g.  $CD = \frac{3}{7}w$

C  $x = \boxed{0}, y = \boxed{9}$

D  $x = \boxed{11}, y = \boxed{5}$

c.  $P\left(\frac{T}{P}\right) = T$

$3\left(\frac{35}{5}\right) = T$

~~21 = T~~  
~~21 = 7 \times 3~~

d.  $b\left(\frac{p}{b}\right) = p$

$10\left(\frac{7}{4}\right) = p$

~~35 = p~~  
~~35 = 2 \times 17 \frac{1}{2}~~  
 $17 \frac{1}{2} \text{ pounds}$

(Kids do  
no solve  
in Part 9)

# Test 3

*any* **Note:** Provide any remedies for test 3 before beginning lesson 36. If more than 1/4 of the students did not pass a test part, present a remedy for that part. You are granted permission to reproduce the Remedy Summary Sheet and blackline masters (Test 3- BLM) at the back of the Teacher's Guide.

## Test 3 Remedies

Test 3	Lesson	Exercise	Textbook Part	Test 3 BLM
Part 1	31	1	-	Test 3-BLM
Part 2	<del>29</del>	<del>2</del>	<del>2</del>	<del>7/111</del>
Part 3	33	1	1	-
Part 4	29	6	6	-
Part 5	<del>27</del>	<del>2</del>	<del>3</del>	<del>7/111</del>
Part 6	29	1	1	-
Part 7	34	4	3 and 4	-
	<del>35</del>	<del>5</del>	<del>3</del>	<del>-</del>
Part 8	29	4	4	-
Part 9	33	3	4	-

alternate screens

no screen

no screen

no screen