

Chapter 8 BLM Answers

BLM 8-1 Chapter 8 Problems of the Week

1. a)

Dimes	Nickels	Total (\$)
3	6	0.60
6	12	1.20
9	18	1.80
14	28	2.80

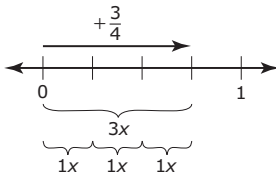
- b) Let d = number of dimes
 $2d$ = number of nickels
 $2(0.05)d + 0.1d = 2.80$
 There are 14 dimes and 28 nickels
 ($14 \times 0.10 + 28 \times 0.05 = 2.80$).
 2. a) $s = 87.5$ km/h b) 11.4 h
 3. 4, 4, 8, 12, 20, 32, 52
 4. There are 11 cats.

BLM 8-3 Section 8.1 Warm Up

1. a) $\frac{5}{2}$ b) $-\frac{8}{1}$ or $-\frac{8}{1}$ c) $-\frac{14}{3}$ or $-\frac{14}{3}$
 d) $-\frac{16}{5}$ or $-\frac{16}{5}$
 2. a) $\frac{7}{5}$ or $1\frac{2}{5}$ b) $-\frac{7}{5}$ or $-1\frac{2}{5}$ c) $-\frac{2}{9}$ d) $\frac{5}{12}$
 e) 2

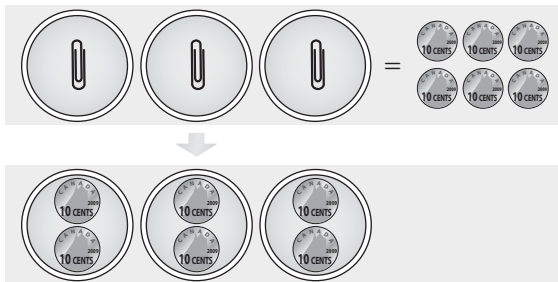
BLM 8-4 Section 8.1 Extra Practice

1.



The diagram shows that $x = \frac{1}{4}$.

2.



The diagram shows that $x = 0.2$

3. a) $x = \frac{2}{15}$ b) $m = -\frac{10}{3}$, or $-3\frac{1}{3}$ c) $y = \frac{3}{10}$
 d) $y = \frac{6}{8}$ or $\frac{3}{4}$
 4. a) $x = 1.24$

Left Side	Right Side
$-4x$	-4.96
$= -4(1.24)$	
$= -4.96$	

b) $x = 1.47$

Left Side	Right Side
$\frac{x}{0.7}$	$= 2.1$
$= \frac{1.47}{0.7}$	
$= 2.1$	

c) $m = -15$

Left Side	Right Side
$\frac{-5}{m}$	$\frac{1}{3}$
$= \frac{-5}{-15}$	
$= \frac{1}{3}$	

5. a) The bracelet cost \$490. b) Eric earned \$1550. c) The regular price of the computer was \$1150.

BLM 8-5 Section 8.2 Warm Up

1. C 2. F 3. E 4. B
 5. a) $\frac{2}{3}$ b) $\frac{1}{2}$ c) $-\frac{5}{9}$ d) $\frac{1}{6}$ e) 3 f) $6\frac{2}{3}$
 6. a) $\frac{3}{8}$ b) $-\frac{5}{6}$ c) $-\frac{17}{8}$ or $-2\frac{1}{8}$ d) $\frac{13}{18}$

BLM 8-6 Section 8.2 Extra Practice

1. a) $x = \frac{1}{8}$ b) $m = 0.75$
 2. $m = \frac{9}{12}$ or $\frac{3}{4}$
 3. a) $x = \frac{5}{3}$ or $1\frac{2}{3}$ b) $c = \frac{-5}{24}$
 4. a) $n = -1.02$ b) $x = -58$
 5. a) n ; $3n + 13 = 82$; $n = 23$
 b) $2827.50 = 27.50p + 215$; 95 people were invited to the banquet.

BLM 8-7 Section 8.3 Extra Practice

1. a) Left Side | Right Side

$3(x - 5)$	18
$= 3(4 - 5)$	
$= 3(-1)$	
$= -3$	

Left side does not equal right side.

b) Left Side | Right Side

$0.2(x + 3)$	1.4
$= 0.2(11 + 3)$	
$= 0.2(14)$	
$= 2.8$	

Left side does not equal right side.



2. $0.4x + (2.2) = 5.4$

Solution:

$$0.4(x + 2.2) = 5.4$$

$$0.4x + 0.88 = 5.4$$

$$0.4x + 0.88 - 0.88 = 5.4 - 0.88$$

$$0.4x = 4.52$$

$$x = 11.3$$

3. a) $x = 10$ b) $m = -1.2$ c) $x = -4$ d) $x = \frac{5}{6}$

4. The value of x is 8.2 cm.

BLM 8-8 Section 8.4 Extra Practice

1. a) $x = 9.3$

b) $x = 8$

c) $x = -9$

d) $m = 5.7$

2. a) $x = 7$ b) $n = 4$ c) $m = 51.4$

d) $n = -42$

3. a) $m = -3$ b) $x = -2$ c) $x = 23$ d) $m = 3$

4.

	Quarters	Dimes
Value	0.25	0.10
Expression	x	$30 - x$
Total Value	$0.25x$	$0.1(30 - x)$

$0.25x + 0.10(30 - x) = 5.85$ There were 19 quarters and 11 dimes in the cash register.

BLM 8-10 Chapter 8 Test

1. D 2. D 3. A

4. $x = 13$ 5. -7.32 6. 50 7. $\frac{1}{8}$

8. a) 4 b) -18 c) 6.6 d) -12

9. a) $56 + 0.15x = 108.50$ b) 350

10. a) $4x - (5) = 16$; $x = 9$

