Algebra 1 – Chapter P

Lesson 1

Name: Answer Key

Evaluate the expression.

1. y + 12, when y = 29

29+12

$\boxed{41}$

2. 47 – x, when x = 38

47 - 38

$\boxed{9}$

3. 0.8a, when a = 7.5

0.8(7.5)

$\boxed{6}$

4. 12.5 + n, when n = 7.6

12.5 + 7.6

$\boxed{20.1}$

5. r(4.6), when r = 8.1

8.1(4.6)

$\boxed{37.26}$

6. 6.25 ÷ g, when g = 2.5

$\frac{6.25}{2.5} = \boxed{2.5}$

7. $\frac{x}{0.9}$, *when* $x = 54$

$\frac{54}{0.9} = \boxed{60}$

8. $\frac{4}{7} \cdot t$, *when* $t = \frac{7}{8}$

$\frac{\cancel{4}^{1}}{\cancel{7}_{1}} \cdot \frac{\cancel{7}^{1}}{\cancel{8}_{2}} = \boxed{\frac{1}{2}}$

Evaluate the power.

9. 9^2

81

10. 2^6

64

11. $(0.4)^3$

0.064

Evaluate the expression.

12. X^2, when $x = \frac{1}{5}$

$\left(\frac{1}{5}\right)^2 = \frac{1^2}{5^2} = \boxed{\frac{1}{25}}$

13. M^4, when m = 0.6

$(0.6)^4 = \boxed{0.1296}$

14. $2y^3$, when y = 4

$2(4)^3 = 2(64)$

$\boxed{128}$

Algebra 1 – Chapter P
Lesson 2
Name: Answer Key

Evaluate the expression

1. $16 \div 8 \cdot 5$

$2 \cdot 5$

$\boxed{10}$

2. $7^2 - 24 \div 3$

$49 - 8$

$\boxed{41}$

3. $5 + 1.2 \div 0.3$

$5 + 4$

$\boxed{9}$

4. $18 \div 6 + 4 \cdot 3$

$3 + 12$

$\boxed{15}$

5. $13 - 15 \div 5 + 9$

$13 - 3 + 9$

$10 + 9$

$\boxed{19}$

6. $\frac{2}{3} \cdot 3^2 - 5$

$\frac{2}{\cancel{3}_1} \cdot \cancel{9}^3 - 5$

$6 - 5$

$\boxed{1}$

7. $8(6 - 2) + 4$

$48 - 16 + 4$

$32 + 4$

$\boxed{36}$

8. $28 - 3(4 + 5)$

$28 - 12 - 15$

$16 - 15$

$\boxed{1}$

9. $1.2 \cdot 5 - 6 \div 3$

$6 - 2$

$\boxed{4}$

10. $(11 + 15) \div 13$

$26 \div 13$

$\boxed{2}$

Evaluate the expression.

11. $3x^4 - 5$, when $x = 5$

$3(5)^4 - 5$

$3(625) - 5$

$1875 - 5$

$\boxed{1870}$

12. $8m^3 \div 6$, when $m = 3$

$8(3)^3 \div 6$

$8(27) \div 6$

$216 \div 6$

$\boxed{36}$

Algebra 1 – Chapter P
Lesson 2

13. $200 - 3y^2$, when $y = 8$

$200 - 3(8)^2$
$200 - 3(64)$
$200 - 192$
$\boxed{8}$

14. $5c^2 - 2$, when $c = 9$

$5(9)^2 - 2$
$5(81) - 2$
$405 - 2$
$\boxed{403}$

15. $3 \cdot 18t^2$, when $t = 1/3$

$3 \cdot 18(\frac{1}{3})^2$
$3 \cdot 18(\frac{1}{9})$
$3 \cdot 2$
$\boxed{6}$

16. $\frac{42}{x} + x$, when $x = 6$

$\frac{42}{6} + 6$
$7 + 6$
$\boxed{13}$

17. $7(x + 5)$, when $x = 10$

$7(10+5)$
$7(15)$
$\boxed{105}$

18. $\frac{5a}{a-6}$, when $a = 8$

$\frac{5(8)}{8-6} \Rightarrow \frac{40}{2} = \boxed{20}$

19. Was the expression evaluated correctly using the order of operations? If not, find an correct the error.

$80 - 1/3(15)^2 = 80 - 5^2 = 80 - 25 = 55$ → no!

$80 - \frac{1}{3}(225)$
$80 - 75$
$\boxed{5}$

* Need to do exponents before division.

Name Answer Key

Algebra 1
Lesson 3

Evaluate the function when x = -2, 0, and 5.

1. $g(x) = 3x$

$3(-2) = -6$
$3(0) = 0$
$3(5) = 15$

2. $r(x) = -x - 7$

$-(-2)-7$ $\quad$ $-(0)-7$ $\quad$ $-(5)-7$
$2-7$ $\quad$ $0-7$ $\quad$ $-5-7$
-5 $\quad$ -7 $\quad$ -12

3. $b(x\_ = 18 - 0.5x$

$18-\frac{1}{2}(-2)$ $\quad$ $18-\frac{1}{2}(0)$ $\quad$ $18-\frac{1}{2}(5)$
$18-(-1)$ $\quad$ $18-0$ $\quad$ $18-\frac{5}{2}$
$18+1$ $\quad$ 18
19

4. $n(x) = -1 - x + 4$

$-1-(-2)+4$ $\quad$ $-1-(0)+4$ $\quad$ $-1-(5)+4$
$-1+2+4$ $\quad$ $-1-0+4$ $\quad$ $-1-5+4$
$1+4$ $\quad$ $-1+4$ $\quad$ $-6+4$
5 $\quad$ 3 $\quad$ -2

Let c(t) be the number of customers in a restaurant t hours after 8 AM. Explain the meaning of each statement.

5. $c(0) = 0$

At 8 AM, there were 0 customers

6. $c(3) = c(8)$

At 11 AM, there was the ~~were 8 customers~~ same number of customers as 4 pm

7. $c(n) = 29$

At any time, there were 29

8. $c(13) < c(12)$

At 9 pm there were less customers than at 8 pm

Algebra 1 – Chapter P
Lesson 3
Name: Answer Key

Translate the verbal phrase into an expression.

1. The difference of 9 and a number n

$9-n$

2. The quotient of a number y and 22

$\frac{y}{22}$ or $y \div 22$

3. The sum of 57 and a number b

$57+b$ or
$b+57$

4. 2/3 of a number x

$\frac{2}{3}x$

5. 18 less than a number c

$c-18$

6. 25 more than twice a number m

$25+2m$ or
$2m+25$

7. The quotient of 8 and twice a number x

$8 \div 2x$ or $\frac{8}{2x}$

8. The sum of 2 and the square of a number r

$2+r^2$

Write an expression for the situation.

9. The amount of money you spent if you started with $40 and now have d dollars.

$40-d$

10. The total height of a 1-foot tall birdbath if it is placed on a base that is b feet tall.

$b+1$ or $1+b$

Algebra 1 – Chapter P
Lesson 3

11. Each person's share of baseball cards if 4 people share c cards equally.

$\frac{c}{4}$ or $c \div 4$

12. Number of minutes in h hours.

$\frac{h}{60}$ or $h \div 60$

Find the unit rate.

13. $\frac{\$75 \div 5}{5 \text{ video games} \div 5}$

\$15/game

14. $\frac{600 \text{ students} \div 8}{8 \text{ classes} \div 8}$

75 students/class

15. $\frac{32 \text{ pencils} \div 4}{4 \text{ boxes} \div 4}$

8 pencils/box

16. You are making candles for your friends. A mold for the candles costs #22.50 and wax to make one candle costs \$5. Write an algebraic expression for the total cost of making x candles. You make 8 candles. Find the total cost.

$5x + 22.50$ or $22.50 + 5x$

$22.50 + 5(8)$

$22.50 + 40$

$\boxed{\$62.50}$

Algebra 1 – Chapter P
Lesson 4
Name: Answer Key

Write an equation or an inequality.

1. The difference of a number c and 17 is more than 33.

$c - 17 > 33$

2. The product of 3 and a number x is at most 21.

$3x \leq 21$

3. The sum of 14 and twice a number y is equal to 78.

$14 + 2y = 78$

4. The difference of 22 and the quotient of a number m and 4 is 54.

$22 - \frac{m}{4} = 54$

5. The sum of 7 and three times a number b is at least 12.

$7 + 3b \geq 12$

Check whether the given number is a solution of the equation or inequality.

6. $6x + 7 = 25$; $x = 3$

$6(3) + 7 = 25$
$18 + 7 = 25$
$25 = 25$ ✓
Yes

7. $22 - 5c = 8$; $x = 3$

$22 - 5(3) = 8$
$22 - 15 = 8$
$7 \neq 8$
No

8. $\frac{b}{4} - 7 = 1$; $b = 36$

$\frac{36}{4} - 7 = 1$
$9 - 7 = 1$
$2 \neq 1$
No

9. $7a + 4 \geq 20$; $a = 2.7$

$7(2.7) + 4 \geq 20$
$18.9 + 4 \geq 20$
$22.9 \geq 20$ ✓
Yes

10. $4y - 3 > 12$; $y = 4$

$4(4) - 3 > 12$
$16 - 3 > 12$
$13 > 12$ ✓
$\boxed{\text{Yes}}$

11. $\frac{m}{3} + 14 < 33$; $m = 9$

$\frac{9}{3} + 14 < 33$
$3 + 14 < 33$
$17 < 33$ ✓
$\boxed{\text{Yes}}$

12. You are buying a new printer and a new scanner for your computer, and you cannot spend over $150. The printer you want costs $80. Write an inequality that describes the most that you can spend on the scanner and still stay within your budget. If you buy a scanner that costs $75, will you remain in your budget?

$\boxed{80 + x \leq 150}$

$80 + 75 \leq 150$
$155 \not\leq 150$
$\boxed{\text{No!}}$

13. You and three of your friends are going to race go-carts. The last time you went, you had a coupon for $3 off each admission and paid $48 for the 4 admissions. What was the total price without the coupon? You pay the regular price this time and share it equally. How much does each person pay?

$\frac{4(x-3)}{4} = \frac{48}{4}$

$x - 3 = 12$
$+3 \quad +3$

$\boxed{x = 15}$

$15(4) = \boxed{\$60}$

No Worksheet

For

Lesson 5

Algebra 1 – Chapter P
Lesson 6
Name: Answer Key

Complete the sentence.

1. The input variable is called the X variable.

2. The output variable is called the y variable.

Tell whether the pairing is a function.

3.

Input	Output
1	15
3	20
5	15
7	20

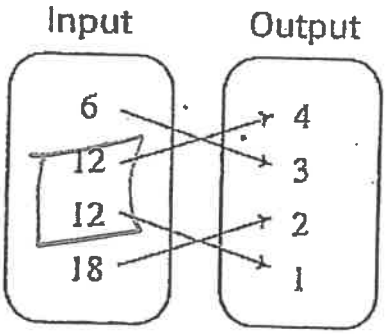
function

4.

Input	Output
5	5
6	5
7	5
8	5

function

5.



Not a function
12 repeats

Make a table for the function. Identify the range of the function.

6. Y = 4x – 2

Domain: 1, 2, 3, 4

X	1	2	3	4
Y	2	6	10	14

4(1) – 2
4 – 2
2

4(2) – 2
8 – 2
6

4(3) – 2
12 – 2
10

4(4) – 2
16 – 2
14

7. Y = 0.1x + 3

Domain: 10, 20, 30, 40

X	10	20	30	40
Y	4	5	6	7

0.1(10) + 3
1 + 3
4

0.1(20) + 3
2 + 3
5

0.1(30) + 3
3 + 3
6

0.1(40) + 3
4 + 3
7

Algebra 1 – Chapter P
Lesson 6

8. $y = \frac{1}{2}x + 2$

Domain: 6, 7, 8, 9

X	6	7	8	9
Y	5	11/2	6	13/2

$\frac{1}{2}(6)+2$
$3+2$
5

$\frac{1}{2}(7)+2$
$\frac{7}{2}+2$
$\frac{7}{2}+\frac{4}{2}$
$\frac{11}{2}$

$\frac{1}{2}(8)+2$
$4+2$
6

$\frac{1}{2}(9)+2$
$\frac{9}{2}+2$
$\frac{9}{2}+\frac{4}{2}$
$\frac{13}{2}$

Write a rule for the function.

9.

Input, x	1	2	3	4
Output, y	×5 5	×5 10	×5 15	×5 20

$y=5x$

10.

Input, x	10	11	12	13
Output, y	−7 3	−7 4	−7 5	−7 6

$y=x-7$

11. The table shows men's shoe sizes in the United States and Australia. Write a rule for the Australian size as a function of the United States' size.

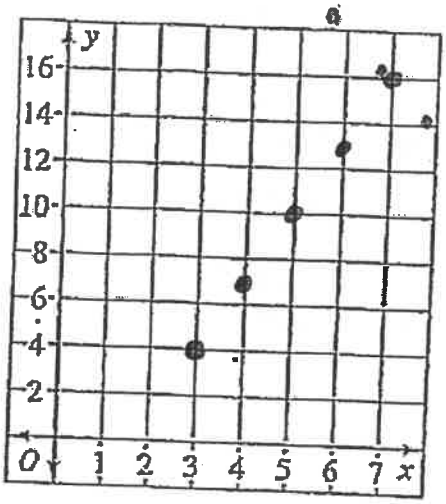
U.S. size	5	6	7	8	9	10
Australian size	−2 3	−2 4	−2 5	−2 6	−2 7	−2 8

$y=x-2$

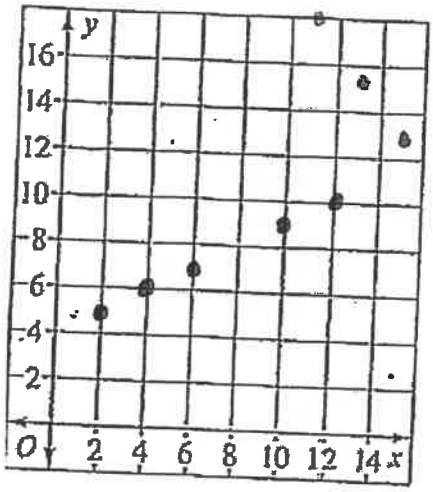
Algebra 1 – Chapter P
Lesson 7
Name: Answer Key

Graph the ordered pairs.

1. (3, 4), (4, 7), (5, 10), (6, 13), (7, 16)



2. (2, 5), (6, 7), (4, 6), (12, 10), (10, 9)



Complete the input-output table for the function.

3. Y = 3x + 2

x	0	1	2	3
y	3(0)+2 0+2 2	3(1)+2 3+2 5	3(2)+2 6+2 8	3(3)+2 9+2 11

4. Y = 4x - 1

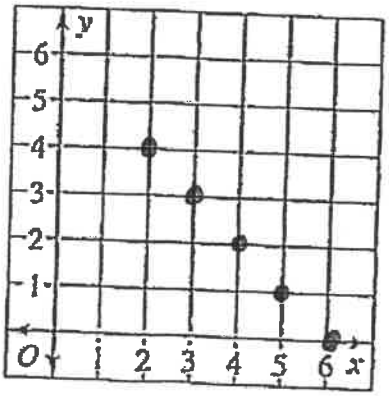
x	1	2	3	4
y	4(1)-1 4-1 3	4(2)-1 8-1 7	4(3)-1 12-1 11	4(4)-1 16-1 15

Graph the function.

5. Y = 6 - x

Domain: 6, 5, 4, 3, 2

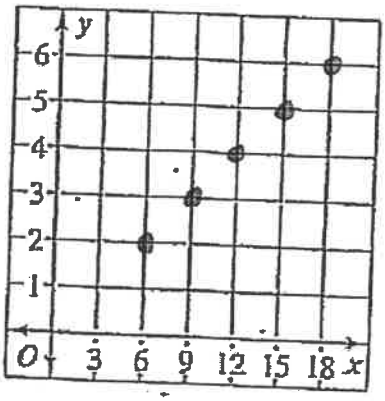
X	Y
6	6-6=0
5	6-5=1
4	6-4=2
3	6-3=3
2	6-2=4



6. Y = 1/3x

Domain: 6, 9, 12, 15, 18

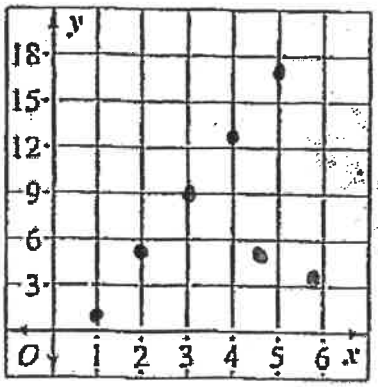
X	Y
6	$\frac{1}{3}(6)=2$
9	$\frac{1}{3}(9)=3$
12	$\frac{1}{3}(12)=4$
15	$\frac{1}{3}(15)=5$
18	$\frac{1}{3}(18)=6$



Algebra 1 – Chapter P
Lesson 7

7. $y = 4x - 3$

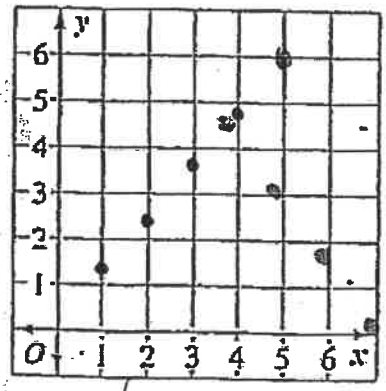
Domain: 1, 2, 3, 4, 5



X	Y
1	4(1)-3 => 4-3 = 1
2	4(2)-3 => 8-3 = 5
3	4(3)-3 => 12-3 = 9
4	4(4)-3 => 16-3 = 13
5	4(5)-3 => 20-3 = 17

8. $Y = 1.2x$

Domain: 1, 2, 3, 4, 5



X	Y
1	1.2(1) = 1.2
2	1.2(2) = 2.4
3	1.2(3) = 3.6
4	1.2(4) = 4.8
5	1.2(5) = 6

Algebra 1 – Chapter B
Lesson 1
Name: Answer Key

Graph the numbers on a number line. Then order the numbers from least to greatest.

1. 2, -3, and 0

-3, 0, 2

2. -5, 7 and -8

-8, -5, 7

Tell whether each number in the list is a whole number, an integer, and/or a rational number.

3. $-1.9, \frac{3}{4}, 0.8, -3$

Whole: None
Int: -3
Rat: -1.9, $\frac{3}{4}$, 0.8, -3

-3, -1.9, $\frac{3}{4}$, 0.8

4. $2.5, -\frac{7}{8}, -0.5, \frac{1}{3}$

Whole: None
Int: None
Rat: 2.5, $-\frac{7}{8}$, -0.5, $\frac{1}{3}$

$-\frac{7}{8}$, -0.5, $\frac{1}{3}$, 2.5

For the given value of a, find -a and |a|.

5. A = 10.2

-a => -10.2
|a| => 10.2

6. A = -14

-a = 14
|a| = 14

7. A = $\frac{1}{2}$

-a = $-\frac{1}{2}$
|a| = $\frac{1}{2}$

Identify the hypothesis and conclusion of the conditional statement. Tell whether the statement is true or false. If it is false, give a counterexample.

8. If a number is negative, then its opposite is positive.

H C

True

9. If a number is even, then its opposite is a whole number.

H C

False, -2 => opposite = -2
-2 is not whole

Evaluate the expression when x = -2.5.

10. -x

-(-2.5)
2.5

11. |x| + 3

|-2.5| + 3
2.5 + 3
5.5

12. |x| - 4

|-2.5| - 4
2.5 - 4
-1.5

Algebra 1 – Chapter B
Lesson 2
Name: Answer Key

Find the sum.

1. -8 + 9

$\boxed{1}$

2. 13 + (-4)

13 - 4

$\boxed{9}$

3. -5 + (-11)

$\boxed{-16}$

4. -6 + (-7)

$\boxed{-13}$

5. -15 + 6

$\boxed{-9}$

6. -21 + 10

$\boxed{-11}$

7. $2\frac{2}{3} + \left(-1\frac{1}{3}\right)$

$\frac{8}{3} - \frac{4}{3} = \boxed{\frac{4}{3}}$

8. $-7\frac{1}{2} + 10\frac{3}{4}$

$\frac{-15}{2} + \frac{43}{4} \Rightarrow \frac{-30}{4} + \frac{43}{4}$

$\boxed{\frac{13}{4}}$

Evaluate the expression for the given value of x.

9. 6 + x + (-11); x = 8

6 + 8 - 11

14 - 11

$\boxed{3}$

10. -14 + x + 14; x = 9

-14 + 9 + 14

-5 + 14

$\boxed{9}$

11. 2.2 + x + (-3.4); x = -2.5

2.2 + (-2.5) + (-3.4)

2.2 - 2.5 - 3.4

-0.3 - 3.4

$\boxed{-3.7}$

Solve the equation.

12. X + 15 + (-15) = 6

X + 0 = 6

$\boxed{X = 6}$

13. 6 + x + (-3) = 0

6 - 3 + x = 0

3 + x = 0

-3 -3

$\boxed{X = -3}$

Algebra 1 – Chapter B
Lesson 3
Name: Answer Key

Find the difference.

1. 12 - (-7)
$12+7$
$\boxed{19}$

2. 22 - (-28)
$22+28$
$\boxed{50}$

3. -6 - (-13)
$-6+13$
$\boxed{7}$

4. -15 - (-9)
$-15+9$
$\boxed{-6}$

5. 5.8 - (-7.9)
$5.8+7.9$
$\boxed{13.7}$

6. -2.6 - (-10.2)
$-2.6+10.2$
$\boxed{7.6}$

7. $\frac{1}{3} - \frac{4}{9}$
$\cancel{\frac{3}{9}+\frac{4}{9}=\boxed{\frac{13}{9}}}$
$\frac{3}{9}-\frac{4}{9}=\boxed{-\frac{1}{9}}$

8. $\frac{1}{2} - \left(-\frac{7}{8}\right)$
$\frac{1}{2}+\frac{7}{8} \Rightarrow \frac{4}{8}+\frac{7}{8}=\boxed{\frac{11}{8}}$

Evaluate the expression when x = -6.4 and y = 10.8.

9. y - x
$10.8-(-6.4)$
$10.8+6.4$
$\boxed{17.2}$

10. x - (-y)
$-6.4-(-10.8)$
$-6.4+10.8$
$\boxed{4.4}$

11. x - y
$-6.4-10.8$
$\boxed{-17.2}$

12. -y - x
$-10.8-(-6.4)$
$-10.8+6.4$
$\boxed{-4.4}$

13. x - y - 2.6
$-6.4-10.8-2.6$
$-17.2-2.6$
$\boxed{-19.8}$

14. y - 5.4 - x
$10.8-5.4-(-6.4)$
$5.4+6.4$
$\boxed{11.8}$

Algebra 1 – Chapter B
Lesson 4
Name: Answer Key

Find the product.

1. 10(-9)
-90

2. -12(-3)
36

3. -11(7)
-77

4. 2.6(-8)
-20.8

5. -3.2(15)
-48

6. -9.5(5)
-47.5

7. $-\frac{1}{2}(28)$
-14

8. -2/3(-21)
$-\frac{2}{3}\left(\frac{-21}{1}\right)$
14

9. 4/5(-20)
$\frac{4}{5}\left(\frac{-20}{1}\right)$
-16

Identify the property illustrated.

10. 5.6(-32) = -32(5.6)
Commutative

11. 0(2.1) = 0
Multicative Property of 0

12. -1(-1.5) = 1.5
Multicative prop of -1

Evaluate the expression when x = -3 and y = 4.1.

13. X + 2y
-3 + 2(4.1)
-3 + 8.2
5.2

14. Y - 4x
4.1 - 4(-3)
4.1 + 12
16.1

15. 5.2x - y
5.2(-3) - 4.1
-15.6 - 4.1
-19.7

16. xy - 10.1
(-3)(4.1) - 10.1
-12.3 - 10.1
-22.4

17. 14.3 - xy
14.3 - (-3)(4.1)
14.3 - (-12.3)
14.3 + 12.3
26.6

18. 3x - |y|
3(-3) - |4.1|
-9 - 4.1
-13.1

Algebra 1 – Chapter B
Lesson 5
Name: Answer Key

Use the distributive property to write an equivalent expression.

1. 5(x + 11)

$5x+55$

2. 3(x - 12)

$3x-36$

3. -4(x + 8)

$-4x-32$

4. 9(2x + 1)

$18x+9$

5. (x - 7)(-10)

$-10(x-7)$

$-10x+70$

6. (4x + 3)5

$5(4x+3)$

$20x+15$

7. x(4x - 1)

$4x^2-x$

8. 2x(x - 1)

$2x^2-2x$

9. -x(5x + 2)

$-5x^2-2x$

Identify the like terms, coefficients and constant terms of the expression.

10. -8 + 2x + 5 + 11x

Like Terms: $-8+5$; $2x+11x$
Coefficients: $2+11$
Constant: $-8+5$

11. $4x^2 + 1 - 3x^2 + 5$

Like Terms: $4x^2+-3x^2$; $1+5$
Coeff: $4+-3$
Cons: $1+5$

12. $7y^2 - 6 + 3y^2 - 15$

Like: $7y^2+3y^2$; $-6+-15$
Coeff: $7+3$
Cons: $-6+-15$

13. 3xy + 5 - 2xy + 10

Like: $3xy+-2xy$; $5+10$
Coeff: $3+-2$
Cons: $5+10$

Algebra 1 – Chapter B
Lesson 5

Simplify the expression.

14. 6 + 10x + 3

$10x+9$

15. 2(3x + 1) + 4x

$6x+2+4x$

$10x+2$

16. 6(5 – x) + 12x

$30-6x+12x$

$30+6x$ OR

$6x+30$

17. 7(x – 1) – 5

$7x-7-5$

$7x-12$

18. 8x + 3(2x – 1)

$8x+6x-3$

$14x-3$

19. -2(x + 4) – 3

$-2x-8-3$

$-2x-11$

20. 11x – (x + 7)

$11x-x-7$

$10x-7$

21. 9 – 2(x – 4)

$9-2x+8$

$17-2x$ OR

$-2x+17$

22. 7x – 3(4 – 2x)

$7x-12+6x$

$13x-12$

Algebra 1 – Chapter B
Lesson 6
Name: Answer Key

Find the multiplicative inverse of the number.

1. -7

$-\frac{1}{7}$

2. -1/5

-5

3. -7/8

$-\frac{8}{7}$

Find the quotient.

4. $-32 \div (-2)$

$\boxed{16}$

5. $-1 \div \left(-\frac{6}{5}\right)$

$-1 \cdot -\frac{5}{6}$

$\boxed{\frac{5}{6}}$

6. $14 \div \left(-\frac{2}{7}\right)$

$\frac{\cancel{14}^{7}}{1} \cdot -\frac{7}{\cancel{2}_{1}}$

$\boxed{-49}$

7. $17 \div \left(-2\frac{1}{8}\right)$

$17 \div -\frac{17}{8}$

$\frac{\cancel{17}}{1} \cdot -\frac{8}{\cancel{17}_{1}} = \boxed{-8}$

8. $-\frac{3}{4} \div 4$

$-\frac{3}{4} \cdot \frac{1}{4} = \boxed{-\frac{3}{16}}$

9. $-\frac{1}{3} \div \frac{1}{5}$

$-\frac{1}{3} \cdot \frac{5}{1} =$

$\boxed{-\frac{5}{3}}$

10. $-\frac{1}{9} \div (-8)$

$-\frac{1}{9} \cdot -\frac{1}{8} = \boxed{\frac{1}{72}}$

11. $-\frac{6}{11} \div (-3)$

$-\frac{\cancel{6}^{2}}{11} \cdot -\frac{1}{\cancel{3}_{1}}$

$\boxed{\frac{2}{11}}$

12. $\frac{5}{8} \div \left(-2\frac{1}{2}\right)$

$\frac{5}{8} \div -\frac{5}{2}$

$\frac{5}{8} \cdot -\frac{2}{5} = -\frac{1}{4}$

$\boxed{-\frac{1}{4}}$

Find the mean of the numbers.

13. 1, -3, -10

$\frac{1-3-10}{3} \Rightarrow -\frac{12}{3} = \boxed{-4}$

14. -15, 4, -22

$\frac{-15+4-22}{3} = \frac{-33}{3}$

$\boxed{-11}$

15. -7.5, 3, -6.5

$\frac{-7.5+3-6.5}{3} = \frac{-11}{3}$

$\boxed{-\frac{11}{3}}$

Simplify the expression.

16. $\frac{-8x+27}{9}$

$\frac{-8x}{9} + \frac{27}{9}$

$\boxed{-\frac{8}{9}x+3}$

17. $\frac{15x-5}{-5}$

$\frac{15x}{-5} - \frac{5}{-5}$

$\boxed{-3x+1}$

18. $\frac{12x-20}{-4}$

$\frac{12x}{-4} - \frac{20}{-4}$

$\boxed{-3x+5}$

Algebra 1 – Chapter B
Lesson 7
Name: Answer Key

Evaluate the expression.

1. $\pm\sqrt{81}$

± 9

2. $\pm\sqrt{25}$

± 5

3. $-\sqrt{400}$

-20

4. $\sqrt{625}$

25

5. $\sqrt{4900}$

70

6. $\pm\sqrt{169}$

± 13

Tell whether each number in the list is a real number, a rational number, an irrational number, an integer, or a whole number. Then order the numbers from least to greatest.

7. $-\sqrt{16}, 3.2, -\frac{3}{2}, \sqrt{9}$

Real: $-\sqrt{16}, 3.2, -3/2, \sqrt{9}$
Rat: $-\sqrt{16}, 3.2, -3/2, \sqrt{9}$
Irr: None
Int: $-\sqrt{16}, \sqrt{9}$
W: $\sqrt{9}$

8. $\sqrt{5}, -6, 2.5, -\frac{24}{5}$

Real: $\sqrt{5}, -6, 2.5, -24/5$
Rat: $-6, 2.5, -24/5$
Irr: $\sqrt{5}$
Int: -6
W: None

Evaluate the expression for the given value of x.

9. $14 + \sqrt{x}$ when $x = 16$

$14+\sqrt{16}$
$14+4$
$\boxed{18}$

10. $\sqrt{x} - 5.5$ when $x = 4$

$\sqrt{4}-5.5$
$2-5.5$
$\boxed{-3.5}$

11. $-9 \cdot \sqrt{x}$ when $x = 25$

$-9 \cdot \sqrt{25}$
$-9(5)$
$\boxed{-45}$

12. $2\sqrt{x} - 1$ when $x = 100$

$2\sqrt{100}-1$
$2(10)-1$
$20-1$
$\boxed{19}$

13. A local park is in the shape of a square and covers an area of 3600 square feet. Find the side length of the park.

$\sqrt{3600} = 60$. Park is 60 ft x 60 ft